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THE UNIVERSITY OF ALBERTA

GROUP DEVELOPMENT AND THE EFFECTS OF LEADERSHIP STYLE

by

© KAREN PATRICK

A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled GROUP DEVELOPMENT AND THE EFFECTS OF LEADERSHIP STYLE submitted by Karen Patrick in partial fulfilment of the requirements for the degree of Master of Education

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ABSTRACT

The purpose of this study was to examine and compare the "phase movement" of two learning groups. One group worked with a "task" oriented leader while the other group worked with a "social-emotional" oriented leader. The subjects were 26 undergraduate students enrolled in a senior educational psychology course (Ed. Psych. 421) at the University of Alberta.

Mann's (1967, 1970) Member-Leader (M-L) observational system was used to analyze the development of the two groups. The data from the scored transcripts were subjected to analyses of variance and various tests of trend in an attempt to create a "map" of the phase movements of the two groups. Each group is described in terms of the number of phases observed, the duration of each phase, and the theme of each phase as revealed by the topical contents and patterns of significant M-L categories. The groups are then compared using these same criteria.

The results of the analyses indicated that the phase movements differed for the two groups. The task-oriented group entered more phases, experienced more conflict and hostility, resolved more issues, and was slightly more productive than the social-emotional group. Neither group

completed all the phases described by Mann.

Implications of the findings for teaching and education were also discussed and possibilities for further research were suggested.

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CHAPTER I

INTRODUCTION

Teacher training institutes are becoming increasingly interested in the interactive behavior within the classroom. Like most leadership training programs, the focus has moved away from the leader to the human relations processes within the group (Gorman, 1969; McLeish, Matheson and Park, 1973). The goal of the teacher is not to teach her students to become compliant followers, but rather to become independent learners. There is a deliberate attempt to make group members as responsible as possible for setting their own goals and finding methods of attaining those goals (Rogers, 1969).

It is a fact that teachers are leaders, merely by the role ascribed to them. However, educators are beginning to realize that any classroom setting is packed with human relations needs that have to be met before students can get on with the learning of subject matter. Thus, besides becoming scholars in their subject areas, teachers must have a knowledge of group dynamics. This involves knowing what kind of teaching method or leadership style will best facilitate learning. Schmuck and Schmuck emphasize that:

> The teacher's instructional style... and the nature of the interpersonal relationships in the classroom are major influences on this teaching-learning process (1971, p. 3).

These two variables are naturally interrelated. That is, the nature of the combined indidivuals in the classroom will, in part, determine the teacher's style of instruction, and in return, her instructional style will influence the nature of the interpersonal relationships, attitudes, and achievement that develop. It is the second aspect of this two-way influence with which this study is concerned.

When investigating the possible alternative teaching styles that might best facilitate learning, there are several factors that a teacher must consider. The most important of these is the goal shared between students and teacher. According to Schmuck and Schmuck (1971) the typical goal determinants are "task-social emotional" and "group-individual". While there are always tasks to be accomplished, there must also be cohesiveness and good morale. Also, there will always be conflict between group goals and individual motives. The teacher must attempt to meet as many of these needs as possible. The question becomes how to accomplish this.

Most learning group researchers agree that a "positive social climate" enhances a student's self-concept and his academic performance (Gorman, 1969; Schmuck and Schmuck, 1971). In spite of this general agreement, however, few direct and detailed studies have been made of the actual

characteristics of positive and negative classroom climates (Feidler, 1964). Schmuck and Schmuck have attempted to fill this need with the following:

> For us, a positive classroom climate is one in which the students share high amounts of potential influence - both with one another and with the teacher; where high levels of attraction exist for the group as a whole and between classmates; where norms are supportive for getting academic work done, as well as for maximizing individual differences; where communication is open and featured by dialogue; and where the process of working and developing together as a group are considered relevant in themselves for study (1971, p. 18).

Here we must assume that the teacher's style of dealing with each of these classroom climate components will more or less determine its success or failure. A key statement in this definition concerns the student's potential influence. Leadership can be performed by many members of the classroom. Some teachers consider this a threat because, if handled poorly, undesirable power conflicts readily arise. Schmuck and Schmuck believe that potential leadership abilities of class members can be used positively and that classrooms have a more favorable climate when leadership is allowed to be executed by many members of the class. This does not mean that the teacher relinquishes her role as leader. It only points out that the teacher must recognize other leaders and allow this to be a positive aspect of the total group process.

Many studies of leadership in learning groups emphasize two general functions - task and social-emotional. Task functions involve the work-oriented, subject-matter

requirements, while the social-emotional functions involve the internal cohesion and interpersonal feelings of the group. Task oriented behaviors could include such things as, initiating ideas, giving information, clarifying, elaborating, and summarizing. Social-emotional behaviors may include encouraging others, harmonizing, and compromising (Schmuck and Schmuck, 1971; Cooper, 1969).

These types of descriptions have emerged from rather recent leadership studies where the emphasis has been on the total group, and leadership is viewed as an interpersonal event rather than simply a type of personality. Past research, however, has looked elsewhere for answers to the leadership question.

Leadership Studies: Historical Trends

Early notions about leadership dealt with it almost entirely in terms of personal attributes or traits. The trait method of investigation yielded some weak but fairly consistent generalizations. Stogdill (1949) reported that capacity, achievement, responsibility, and participation are qualities frequently associated with leadership. Leaders tend to be masculine, older, larger, more authoritarian, more dependable and more emotionally stable than other group members (Shaw, 1971). Mann (1959), in a review of research before 1959, included dominance and interpersonal sensitivity as attributes common to leaders. Although the trait approach successfully isolated some typical leader-

ship characteristics, it has been criticized because it did not include the "characteristics of the situation" (Bavelas, 1960). A trait that is positively related to leadership in one situation may be unrelated to even negatively related in another (Shaw, 1971).

More recent research on leadership focused on personality and behaviors which related to "leadership style"; that is, the set of behaviors that characterize activities during the time of the investigation. This change in emphasis came about because it was recognized that in order to understand leadership, it is also necessary to understand the leader's interactions with the group, or his "style" of dealing with group members. Thus, social scientists began examining more closely members' perceptions of the leader. The classical studies by K. Lewin and his associates (Lewin, Lippitt and White, 1939) comparing autocratic and democratic leadership styles with four boys' groups set in motion a number of research programs in this area. Most of these studies compared task-centered and person-centered styles: authoritarian versus non-authoritarian (Shaw, 1955); participatory versus supervisory (Preston and Heintz, 1949; Hare, 1953); hierarchical versus autonomy (Morse and Reimer, 1956). The results of most of these investigations indicated that the person-centered, non-directive style was preferable in terms of personal growth to the task-centered, directive style.

Research and experience subsequent to these studies

suggests that it was incorrect to stereotype a leader as being one type or another. Shaw comments that one type of leadership is not universally better than another, but that "...the kind of leadership behavior that is most effective depends upon the situation in which the leader finds himself" (1971, p. 275). He supports this statement with data from Fiedler's (1964) studies of the relationship between situational variables and effective leadership.

Fiedler's studies are based on an interaction or "contingency" model of leadership where an attempt is made to integrate the effects of leadership styles and situational variables. What Fiedler says is that the effectiveness of a group is contingent upon the interaction between leadership style and the degree to which the group situation is "favorable" to the leader. A favorable situation for the leader is defined as one in which leader-member relations are good, the task is highly structured, and the leader's position is strong. An unfavorable situation is one in which leader-member relations are poor, the task is unstructured, and the leader's power position is weak. Shaw interprets Fiedler's model as follows:

> A task-oriented leader is more effective when the group-task situation is either very favorable or very unfavorable for the leader, whereas a relationship-oriented leader is more effective when the group-task situation is only moderately favorable or unfavorable for the leader (1971, p. 286).

Fiedler concludes that it is possible to improve the effectiveness of leadership by accurate diagnosis of group-task situa-

tions and by altering the leader's work environment. Group performance can be improved either by modifying leader behavior or modifying the group-task situation.

Although the emphasis in leadership research has moved away from leadership "traits" and leadership "styles", it is still helpful to make some distinctions between different types of leaders. Kemp rationalizes the necessity for making these distinctions in terms of "leadership functions", or filling the needs of the members. "From the viewpoint of the member, the leader improves the social milieu and widens the field of participation" (1970, p. 205).

Teacher Effectiveness: Historical Trends

Studies of teacher effectiveness followed similar historical phases. Glick (1968) described two major trends. The first involved the study of teacher personality characteristics and how these affected achievement and attitudes of students. The second looked at teacher behaviors and their effects. During this second phase we see studies such as the Lewin, Lippitt and White (1939) investigation of democratic, authoritarian, and laissiz-faire leadership styles; Anderson's (1939) study of dominative and integrative styles; and Withall's (1951) research on teacher-centered and student-centered climates. In all these studies it was assumed that the teacher was the most influential member of the group and class climate was defined almost entirely in terms of leadership behaviors. The results

demonstrated some of the different effects of various teacher behaviors but did not really contribute to the understanding of the total classroom group process.

Schmuck and Schmuck (1971) attempted to extend the second (teacher behavior) trend to include recent research in group dynamics. They view their approach as a response to the growing awareness by educators of peer group influence in the classroom. Their model incorporates the movement away from the traditional teacher-student relationship where the student is the passive learner, to what Glick (1968) calls the "mediational model" which views the teacher's behavior as being mediated by the classroom group process. This model can be seen as closely related to functional models of leadership (Shaw, 1971) and to Fiedler's (1964) "contingency" model of leadership.

This new emphasis on student perceptions and student-teacher relationships initiated some attempts to systematically analyze these relationships. Flander's (1960) Interaction Analysis investigated the frequency of teacher-student interactions, but did not include the feelings involved or member-member communications. R.D. Mann (1967, 1970) devised an observational system that included all verbal communication in a group and the underlying feelings involved. He based his work on the popular assumption that the emotional aspect of the classroom is an integral part of the total teacher-student relationship. He claimed that:

> To ignore this aspect of what is happening in the classroom is to ignore the very evidence one so desperately needs in order to figure out both how the class is going and what, if anything, needs to be done in the way of change (1970, p. 16).

The goal of his scoring system was to obtain empirical measures of how the classroom participants are feeling and acting, and how these change over time.

The Purpose of This Study

Most current educators recognize the need for a teacher-leader to facilitate both task and social-emotional needs in the classroom. In order to pursue more fully the implications of task and social-emotional functions in the learning group, this study will investigate the dynamics of two groups where it was attempted to keep these two leadership functions separate.

The two leadership styles used are defined in terms of "behaviors" that the instructors attempted to maintain throughout the sessions. The task-oriented instructor displayed behaviors described by the students as "businesslike", "can summarize well", "interprets information and makes diagnoses", "knowledgeable", and "productive". The social-emotional or affective-oriented instructor was described by the students as "warm and understanding", "sincere and devoted", "appreciative", "eager to get along", and "tender and unselfish". The PAT Schedule of Leader-Member Relationships was used to evaluate the behavioral differences between the two leaders, and Mann's (1967, 1970) Member-Leader

(M-L) Observational System was used to analyze and compare the group process and phase movement of the two groups.

This study is essentially exploratory in nature. However, because of the systematic variation of leadership style, some fairly specific effects were anticipated. The emerging leadership phenomenon presented by Bales (1955) suggests that a compensatory leader would emerge in each group. That is, where "task" leadership is lacking, a member would emerge as "task" leader, and vice versa. It was also supposed that neither group would pass through all the phases described by Mann (1967) because of the interdependence of task and social-emotional functions. Finally, it was anticipated that the nature of the group processes for each group, or the number and duration of phases would differ for each of the two groups.

CHAPTER II

REVIEW OF THE LITERATURE

Most current literature indicates that an effective group learning situation exists only when both the emotional needs and task needs of the members are heeded. However, even leaders who recognize the mutual dependency of these two needs often have difficulty establishing a leadership style that effectively incorporates both. A look at some of the current group development models may give the potential leader some insight into how these two needs interrelate.

In general, work groups develop along the dimensions of both task performance and emotionality. In the beginning, issues of belongingness and trust tend to be of primary concern. As patterns of work begin to develop, social-emotional issues become less prominent, but usually surface again near the end of the group life. Learning can be aided or impeded, depending on how the prominent issues confronting the group are handled (Schmuck and Schmuck, 1971). Many authors deal with the fluctuations of emotional and task problems in terms of rather specific "stages" or "phases", where movement from one stage to the next is dependent upon the successful resolution of the issues encountered in the previous stage.

This concept forms the nucleus of many influential theories of group development today. Some of these are briefly documented in the following review of recent literature on the subject.

An Overview of Some Theories of Group Development

Theoretical systems for describing group development have been largely psychoanalytical or clinical in nature. Authors like Redl (1942), Bion (1961), Bennis and Shepard (1956), Stock and Thelen (1958), Kaplan and Roman (1963), Mills (1964) and Schutz (1958, 1966) have attempted to outline the development of self-analytic groups (i.e., groups largely concerned with self-growth, as opposed to "learning" groups", where the main concern is task) by describing the group process in terms of unconscious feelings at various points in time. Those who deal with members' feelings toward the leader (Redl, 1942; Bennis and Shepard, 1956; Bion, 1961; Kaplan and Roman, 1963) tend to explain this relationship in terms of past relations and methods of dealing with authority figures. That is, there is an assumption of underlying dynamics in the Freudian manner. This leads to the conclusion that through transference, there is a hidden agenda - the relation of members to the leader as an authority or love figure (Shepard, 1972). It is the implications of many of these psychoanalytic contributions which forms the theoretical base of Mann's (1966) Member-Leader (M-L) Scoring System.

Most of these theories tend to agree on the basic issues of group development, differing largely in terms of emphasis rather than principle (McLeish et al., 1973). There is some disagreement over the question of whether the phases which groups go through are repetitive (Bion, 1961), cyclical (Schutz, 1958), successive (Tuckman, 1965), or combinations of these (Bradford, 1964; Bennis and Shepard, 1956; Gibb, 1964; Mann, 1967). Group development models also differ as to whether they leave the group at its apex (work phase) or provide for the group's decline. The latter is found in the work of Mills (1964), Schutz (1958, 1966), Mann (1967), and Dunphy (1968).

(1) Dependency Issue

There is wide agreement that the issue of dependency on the leader is important at the beginning of the group life and there is often initial anxiety, apprehension, and testing of the limits and reality of the new situation. McLeish et al. (1973) and others point out that these early feelings of dependence, apprehension and vulnerability may recur more or less frequently in the life of the group and there is a need to accommodate individual differences. This notion is supported by Schutz' (1958, 1966) recurrent cycle model that suggests that the members' earliest and final concern is with "inclusion" and the location of the group's boundaries. Mann (1967) expands this early stage to include what he calls, "premature enactment" where attempts

to deal with the authority issues occur too early to be effective. This is preceded by the usual dependency, anxiety, and complaining reactions, which in combination with the frustration of the "premature enactment" contributes to the "crisis" phase which follows.

(2) Confrontation

The "crisis" or "confrontation" point in group development is characterized by frustrations, hostility and counter-dependence (Bennis and Shepard, 1956; Mann, 1966). This usually arises when it is clear that the leader is not going to fulfill the expectations that most members had. Here members feel that they must make a decision about what to do with the leader. It is at this point that the various models of group development begin to differ. Some see this stage as resolving "the authority issue" and followed by increased intimacy (Bennis and Shepard, 1956). Others see it followed by "openness" (Bradford, 1964), "group cohesion" (Tuckman, 1965), or "production" (Mills, 1964). Mann (1966) feels that the dependency or member-leader issue is cyclical - that this issue is never fully resolvable. McLeish et al. (1973) and Gibb (1964) suggest that it is the leader's reactions at this time that largely determine the results of this phase. McLeish claims that where the group is unstructured and more or less "leaderless" and the leader makes no attempt to alleviate member anxieties about dependency, the confrontation is generally overt. In the more

conventional, didactic group, where the leader attempts to reduce interpersonal anxiety, there is more subversive hostility. McLeish concludes that the former is a more fruitful reaction, as the traditional response (latter) tends to foster a "leader nurturnace" (p. 134) and chances of resolving the authority issue are lessened.

(3) Work Phase

The middle phase or work phase of the group is agreed upon by most authors as a time for expression, experimentation, sharing insight, and analysis of what has gone in the group so far. Here member roles tend to become differentiated (Bales, 1950; Bales and Slater, 1955; Dunphy, 1968), the atmosphere is "group-centered" and is characterized by work and a rise in feelings of intimacy (Mann, 1966).

(4) Termination

As noted earlier, some writers leave the group at this point while others include a phase of group termination. Mills (1964) reports that the termination stage is characterized by attempts to confirm that the group has produced something worthwhile. Dunphy (1968) agrees with this description and adds that it can also contribute to the rise of the "messiah-hero" myth. Mills (1964) and Schutz (1958) emphasize the task of dissolving the group and preparing to reenter the outside world. Mann (1966, 1967) reports that there are often feelings of loss and sadness at separation

accompanied by a desire for the leader to proclaim his admiration of the group. There is also a tendency for members to berate themselves for not fulfilling their own work expectations.

Some authors have attempted to reduce these rather involved and somewhat intuitive descriptions of social interaction to a more limited set of underlying dimensions. Schutz (1958) postulated three basic needs which he labeled "inclusion", "control", and "affection". Bennis (1957) describes "oral", "anal", and "phallic" dimensions, while Kaplan and Roman (1963) examine "dependency", "power", and "intimacy" themes (Mann, 1966). Most studies, however, have neglected to include observational techniques to statistically verify the phases or dimensions described. In an attempt to meet this need we see Bales' (1950) Interaction Process Analysis (IPA), Mills' (1964) Sign Process Analysis (SPA), and finally Mann's (1967) Member-Leader (M-L) Observational System. Although Mann's system is based largely on the work of Bales and Mills, he tends to criticize them as being, "...quite removed from the dynamic processes and feelings which clinicians tend to describe or perceive", adding that "...these more sociological observation systems should be supplemented by a scoring system more congruent with the psychological study of individual dynamics" (1966, p. 87).

Research Related to the Present Study

The remainder of this chapter will include a more detailed description of four group dynamics theories that will, hopefully, clarify what the author feels is a need to look at the effects of two specific leadership styles on phase movement by means of a systematic scoring system.

The Bennis and Shepard (1956) theory of group development is presented because it represents the beginnings of a popular trend in group dynamics and is an example of an attempt to "modernize" the more traditional psychoanalytic theories. This and the Schutz (1958, 1966) model appear to provide much of the theoretical background for Mann's M-L system. Schutz' model is basically an attempt to objectify the psychoanalytic approach to groups by searching for underlying dimensions or needs by means of a self-rating method of observation.

Although both the above theories emphasize member-leader relations, they tend not to provide for the direct effects of leadership style on the group process. Therefore, included also is the Gibb (1964) theory of group development because it introduces action techniques for improving group processes by demonstrating the effects of two different leadership styles. The Bales-Parsons (1956) analysis of group processes is presented as a viable alternative to the more prevalent theories of single leadership function.

This will be followed by a summary of the Bales' Interaction Process Analysis (IPA) and Mann's Member-Leader

Observational System.

(1) Bennis and Shepard (1956) Theory of Group Development

The Bennis and Shepard model of group development is basically an elaboration of the earlier conceptions about groups presented by Freud (1921), Redl (1942), and Bion (1961). An essential presupposition of the theory is that the group itself is unaware of its own dynamics (McLeish et al., 1973). The theory states that the major problems that a group has to face are dealing with "authority" and "intimacy". As the group attempts to overcome these problems they move into various phases. Individual members and subgroups are important as they tend to force the resolution of certain issues.

This model of group dynamics outlines a theory of development for groups where the basic goal is the improvement of "internal communications systems" (p. 416). This involves identifying two areas of internal uncertainty in the group, or obstacles to valid communication. These are defined as: (1) Dependence,* or authority relations, and (2) Interdependence, or personal relations. In its development the group moves from preoccupation with authority relations to preoccupation with personal relations. Within these two major phases of development are three subphases.

---

* Bennis (1964) later divided members into three categories according to the manner in which they dealt with the uncertainties of dependence.

During the Dependence phase, the group moves from: (1) preoccupation with submission, to (2) preoccupation with rebellion, to (3) resolution of the dependence problem. Within the Interdependence phase the group moves from: (4) preoccupation with intermember identification, to (5) a preoccupation with individual identity, to (6) a resolution of the independence problem (see Figures 1 and 2).

With regard to the effects of individual personalities of group members, Bennis and Shepard identify four typical personality types: (1) the dependent, who finds comfort in the authority structure, (2) the counterdependent, who is discomfitted by authority structures, (3) the overpersonal member who strives for a high degree of intimacy with everyone, and (4) the counterpersonal member, who tries to avoid intimacy. Any member who is compuslive in any of these four roles is considered "conflicted" and often stands in the way of group movement. The "unconflicted" members are considered responsible for the major movements of the group toward valid communication and are termed "independents".

A "barometric" event is defined as an event capable of moving the group from one phase to the next and requires a "catalytic" agent (an independent) to bring it about. Bennis and Shepard have isolated two major events that they consider barometric: (1) removal of the trainer (as part of the resolution of the dependence problem), and (2) evaluation-grading requirements near the termination of a course.

FIGURE 1

BENNIS AND SHEPARD (1956) MODEL OF GROUP DEVELOPMENT - PHASE I

	Subphase 1 Dependence-Submission	Subphase 2 Counterdependence	Subphase 3 Resolution
1. Emotional Modality	Dependence-Flight.	Counterdpendence-Fight. Off-target fighting among members. Distrust of staff member. Ambivalence.	Pairing. Intense involvement in group task.
2. Content Themes	Discussion of interpersonal problems external to training groups.	Discussion of group organization; i.e., what degree of structuring deivces is needed for "effective" group behavior"	Discussion and definition of trainer role.
3. Dominant Roles (Central Persons)	Assertive, aggressive members with rich previous organizational or social science experience.	Most assertive counterdependent and dependent members. Withdrawal of less assertive independents and dependents.	Assertive independents.
4. Group Structure	Organized mainly into multi-subgroups based on members' past experiences.	Two tight subcliques consisting of leaders and members, of counterdependents and dependents.	Gropu unifies in pursuit of goal and develops internal authority system.

FIGURE 1 (CONTINUED)

	Subphase 1 Dependence-Submission	Subphase 2 Counterdependence	Subphase 3 Resolution
5. Group Activity	Self-oriented behavior reminiscent of most new social gatherings.	Search for consensus mechanism: Voting, setting up chairmen, search for "valid" content subjects.	Group members take over leadership roles formerly perceived as held by trainer.
6. Group movement facilitated by:	Staff member abnegation of traditional role of structuring situation, setting up rules of fair play regulation of participation.	Disenthrallment with staff member coupled with absorption of uncertainty by most assertive counterdependent and dependent individuals. Subgroups form to ward off anxiety.	Revolt by assertive independents (catalysts) who fuse subgroups into unity by initiating and engineering trainer exit (barometric event).
7. Main Defenses	Projection. Denigration of authority.		Group moves into Phase II.

FIGURE 2

BENNIS AND SHEPARD (1956) MODEL OF GROUP DEVELOPMENT - PHASE II

	Subphase 4 Enchantment	Subphase 5 Disenchantment	Subphase 6 Consensual Validation
Emotional Modality	Pairing-Flight. Group becomes a respected icon beyond further analysis.	Fight-Flight. Anxiety reactions. Distrust and suspicion of various group members.	Pairing, understanding, acceptance.
Content Themes	Discussion of "group history", and generally salutary aspects of course, group, and membership.	Revival of content themes used in Subphase I: What is a group? What are we doing here? What are the goals of the group? What do I have to give up-personally-to belong to this group? (How much intimacy and affection is required?) Invasion of privacy vs. "group giving". Setting up proper codes of social behavior.	Course grading system. Discussion and assessment of member roles.
Dominant Roles (Central Persons)	General distribution of participation for first time. Overpersonals have salience.	Most assertive counterpersonal and overpersonal individuals, with counterpersonals especially salient.	Assertive independents.

FIGURE 2 (CONTINUED)

	Subphase 4 Enchantment	Subphase 5 Disenchantment	Subphase 6 Consensual Validation
Group Structure	Solidarity, fusion. High degree of camaraderie and suggestibility. Le Bon's description of "group mind" would apply here.	Restructuring of membership into two competing predominant subgroups made up of individuals who share similar attitudes concerning degree of intimacy required in social interaction, i.e., the counterpersonal and overpersonal groups. The personal individuals remain uncommitted but act according to needs of situation.	Diminishing of ties based on personal orientation. Group structure now presumably appropriate to needs of situation based on predominantly substantive rather than emotional orientations. Consensus significantly easier on important issues.

FIGURE 2 (CONTINUED)

	Subphase 4 Enchantment	Subphase 5 Disenchantment	Subphase 6 Consensual Validation
Group Activity	Laughter, Joking, humor. Planning out-of-class activities such as part parties. The institutionalization of happiness to be accomplished by "fun" activities. High rate of interaction and participation.	Disparagement of group in a variety of ways: high rate of absenteeism, tardiness, balkiness in imitating total group interaction, frequent statements concerning worthlessness of group, denial of importance of group. Occasional member asking for individual help finally rejected by the group.	Communication to others of self-system of interpersonal relations; i.e., making conscious to self, and others aware of conceptual system one uses to predict consequences of personal behavior. Acceptance of group on reality terms.

FIGURE 2 (CONTINUED)

	Subphase 4 Enchantment	Subphase 5 Disenchantment	Subphase 6 Consensual Validation
Group movement facilitated by:	Independence and achievement attained by trainer-rejection and its concomitant, deriving consensually some effective means for authority and control. (Subphase 3 rebellion bridges gap between Subphases 2 and 4).	Disenchantment of group as a result of fantasied expectations of group life. The perceived threat to self-esteem that further group involvement signifies creates schism of group according to amount of affection and intimacy desired. The counterpersonal and overpersonal assertive individuals alleviate source of anxiety by disparaging or abnegating further group involvement. Subgroups form to ward off anxiety.	The external realities, group termination and the prescribed need for a course grading system, comprise the barometric event. Led by the personal individuals, the group tests reality and reduces autistic convictions concerning group involvement.
Main Defences	Denial, isolation, intellectualization, and alienation.		

In summary, the Bennis and Shepard theory of group development involves the total evolution of a group, represented by changes in emphasis from power to affection, and from role to personality.

Shepard (1961) later described a leadership approach considered to be appropriate for the type of group development documented in the Bennis and Shepard (1956) article summarized above. He stated that the basic role of the leader is to "...help the group identify and overcome obstacles to valid communication" (1961, p. 638). He cautioned that adherence to a specific doctrine in unwise but presents some general guidelines that the leader should bear in mind.

Because the leader is frequently the "raison d'être, he automatically becomes a projective figure - an object of love and hate, oppression and protection. How he responds to these initial uncertainties is very important. The biggest problems here are what Shepard describes as the "dependency seduction" and the "counterdependency trap", both of which must be handled skillfully if the group is to progress. This issue is usually resolved when there is an acceptance of the leader as member. The central issues then become those of intimacy and sharing responsibility (task). Here it is important for the leader to prevent "perceptual transformation" (p. 641), or attempts to transform the situation into something familiar or irrelevant. The leader does this by helping members clarify the here-and-now problems of the

group.

Because uncertainty (task or interpersonal) is a continual problem, the leader invariably tries to reduce the uncertainty by helping members realize that others share the same feelings, or by what Shepard refers to as "consensual validation of experience" (p. 641).

(2) Schutz' (1966) Theory of Group Development

Schutz' model is based on three sequential needs: first is the members' need for "inclusion", followed by the need for "control", and finally the need for "affection". This cycle may recur several times during the group's development, except for the final stages where the sequence tends to reverse itself.

"Inclusion" refers to a need for togetherness and manifests itself through behavior designed to attract the attention and interest of others. There is a need to feel part of the group and problem-solving behavior does not proceed well until this stage has been settled. When inclusion is established, the group moves on to power struggles, decision-making, and sharing of responsibilities, or what Schutz calls "control". Here each member attempts to establish an appropriate level of influence in the group. The person with a high need to control will often display rebellion and refusal to be controlled, while the person with a high need to be controlled is often compliant and submissive to others. Last is the stage of "affection" where

members attempt to resolve the emotional issues surrounding interpersonal relations.

Schutz' theory of group development evolved from his earlier theory of interpersonal behavior referred to as FIRO, or Fundamental Interpersonal Relations Orientation (1958). The FIRO is a questionnaire which consists of a check list of 54 statements designed to measure a member's propensities along the three interpersonal dimensions cited above. The three dimensions used for his 1966 model were derived partly from a factor analysis done by Schutz (1958) and partly from the theoretical notions of Bion (1961) and Stock and Thelen (1958).

For each dimension, the individual "expresses" a need to other people and/or that he "wants" a need fulfilled for him by another person. For example, on the inclusion dimension, one person may have a strong need to include others but may have a low need to want inclusion for himself. Thus, one aspect is expressed behavior, while the other is wanted behavior. Figure 3 shows the extreme types along the three dimensions.

This theory assumes that group activities are predictable from knowledge of members' interpersonal needs (expressed and wanted) and the principles (of compatibility) governing their interaction. "Compatibility" of classroom groups can be gauged by estimating whether or not each of these needs is expressed in sufficient amount to satisfy student wants. Compatible groups have members who want inclu-

FIGURE 3

EXTREME TYPES ON THE THREE INTERPERSONAL DIMENSIONS

Expressed Behavior			Wanted Behavior	
		Dimension		
High	Low		High	Low
Oversocial	Undersocial	INCLUSION	Social-compliant	Countersocial
Autocrat	Obedient	CONTROL	Submissive	Rebellious
Overpersonal	Underpersonal	AFFECTION	Personal-compliant	Counterpersonal

sion, control and affection and who express them to an equal degree. Incompatible groups do not have members who compliment one another's needs. Schutz concludes that classroom groups can optimally develop only if students are psychologically compatible.

Schutz points out that groups need a "focal" person to initiate the "appropriate atmosphere" for compatibility. Where leaders are imposed and members have heterogeneous needs (classroom, for example) an appropriate atmosphere can be created if the teacher is sensitive to individual inclusion, control and affection needs.

(3) J.R. Gibb (1964) Theory of Group Development and Leadership

Gibb presents a model of group development which deals with both emotionality and problem-solving. Implicit in his model is a theory of personality development where the critical dimensions of growth of the personality are equivalent to group concerns. He states that, "...growth is an interdependent process. As persons developm they are better able to participate in group growth. Persons are better able to grow when they are attaining membership in a developing group" (p. 288).

Gibb cites four model concerns that arise in all social structures. They are "acceptance", "date-flow", "goal formation", and "social control". These concerns generate attempts to reduce these same concerns and this reduction produces

movement and growth. Unlike other group development theories that describe group process in terms of cyclical or successive stages, Gibb suggests that, "...group growth is a gradualistic and global process, in which themes and subthemes may intertwine but in which the dramatic quality is the wholeness, or the 'Gestalt'" (p. 289). He describes movement in terms of consistent sequential changes over time rather than in terms of stages or phase movements. His four model concerns tend to recur throughout the group life but are emphasized more at some points than others. The first prominent concern is "acceptance" and involves the formulation of confidence and trust in the group and in self. This concern becomes differentiated into concerns about degree of membership in the various groups of which a person is a part. The second concern is what Gibb calls "data'flow" and has to do with the flow of feeling and perceptual data through the member or through the group. It finds its expression in decision making and choice behavior in the group. The third or "goal-formation" concern includes various action sequences, problem-solving, and decision-making. This concern finds expression in productivity about working, learning, and growing. "Control" is the last concern and has to do with resolving earlier intrapersonal and interpersonal behavior, roles and expectancies. This process becomes a concern about organization (see Figure 4).

These concerns can exist at all levels of awareness and each dimension is contingent upon growth in each of the

FIGURE 4

DIMENSIONS IN GROUP AND PERSONAL GROWTH

Primary Model Concerns	Derivative Model Concerns	Signs of Personal Growth	Signs of Group Growth
Acceptance	Membership	Acceptance of self and others	Supportive and climate of trust
Data-Flow	Decision	Spontaneity, awareness	Reality communication, functional feedback
Goal-Formation	Productivity	Integration, directionality	Goal integration, tractability level
Control	Organization	Interdependence	Interdependence, participative action and structure

preceding dimensions. For example, data-flow is possible only within the limits of trust formation. Thus, group formation occurs as a continuous set of solutions to the problems deriving from the four focal concerns.

Gibb emphasizes the importance of leadership strategies as determinants of group and individual growth. He distinguishes two clusters of leadership behavior. They are "persuasive" and "participative" (see Figures 5 and 6). The "persuasive" leader behaves from an orientation of distrust. Students are not considered wise enough to make decisions for themselves. Hence, the leader makes the decisions in all four areas of concern through a rather formalized process. His authority position is clear and he is basically task-oriented. In contrast with this, the "participative" leader begins by trusting and accepting members. He encourages them to make their own decisions and the climate is informal and emotionally supportive.

Gibb concludes that the participative leadership style is most likely to facilitate the growth process he describes. The persuasive leader, he claims, not only inhibits the growth of others but inhibits his own growth along the four focal concerns.

(4) Bales-Parson's (1956) Structural-Functional Analysis of Small Groups

This model is based largely on the experimental studies of Bales (1950), Bales and Slater (1955), Bales and Strodtbeck (1951), and the theoretical framework of Talcott Parsons

FIGURE 5

"PERSUASIVE" LEADERSHIP STYLE

Model Concern	Orientation	Reaction in Group
Acceptance (Membership)	Fear Distrust	Facade building Cynicism, suspicion
Data-Flow (Decision)	Strategy Facade	Circumvention Distortion
Goal-Formation (Productivity)	Manipulation Persuasion	Apathy, flight Suspicion, cynicism
Control (Organization)	Control Bargaining	Dependency Hostility

FIGURE 6

"PARTICIPATIVE" LEADERSHIP STYLE

Model Concern	Orientation	Reaction in Group
Acceptance (Membership)	Confidence Trust	Trust Diversity, exploitation
Data-Flow (Decision)	Openness Spontaneity	Feedback, exposure Consensus potential
Goal-Formation (Productivity)	Self-assessment Problem solving	Ego strength Creativity
Control (Organization)	Permissiveness Interdependence	Participative form Participative function

(1956). It is an example of a social systems approach to group process and emphasizes the phenomenon of emerging leaders.

According to this theory, problem-solving groups tend to pass through three phases: from an emphasis on problems of "orientation", to problems of "evaluation", and finally to problems of "control". Concurrent with these transitions is a relative increase in both negative and positive reactions. The first phase involves giving and receiving information about possible problem solutions. The middle phase is characterized by the giving of opinions and evaluations. Major task decisions are generally made during this stage. In the final stage, the group attempts to attain cohesion and attention turns to emotional needs. Over the total series of meetings members gradually spend less time performing task-oriented behaviors and more time performing social-emotional behaviors.

In order for the small problem-solving group to operate efficiently, the Bales-Parsons' Model proposes that two, mutually supportive kinds of leadership are required. These leadership roles can be adopted by any number of group members. The first is referred to as "expressive" (or social-emotional) leadership, where acts of communication tend to include "shows solidarity", "understands", "concurs", and "asks for expression of feelings". The second is "instrumental" (or task-oriented) leadership, where acts of communication tend to include, "gives suggestions", "clarifies",

"disagrees", and "deflates others' status". From the group function point-of-view, "instrumental" refers to the need to acquire problem-solving strategires, and "expressive" refers to the need to maintain the integration of various parts of the system.

Whether a member-leader adopts an expressive or instrumental role depends in part on the psycholgocial make-up of the other group members. Instrumental leadership tends to appeal to more aggressive, authoritarian people, while expressive leadership attracts people who are more accommodative and sensitive. The Bales-Parsons' theory suggests that learning groups will be more effective when the group provides both types of leaders because groups tend to alternate in a cyclical fashion between task emphasis and social-emotional emphasis. It suggests further that while these two kinds of leadership might be provided by a single person, they tend not to be. This theory is contrasted with the approach prevalent in leadership literature which expects effective leadership to be provided by one person. There are some writers (Etzioni, 1965; Gibb, 1960) who feel that the Bales-Parsons' recognition of dual leadership has contributed more to an understanding of group process that has any other experimental finding because of its applicability to complex organizations outside the laboratory setting.

Systems for Coding Group Development

(1) Bales' (1950) Interaction Process Analysis (IPA)

During the 1950's various scoring systems were devised to verify some of the theoretical models of small group development summarized above. Bales' (1950) Interaction Process Analysis (IPA) was one of the first comprehensive observational systems and formed the basis of subsequent systems. His work is especially evident in Mann's (1967) Member-Leader Observational System.

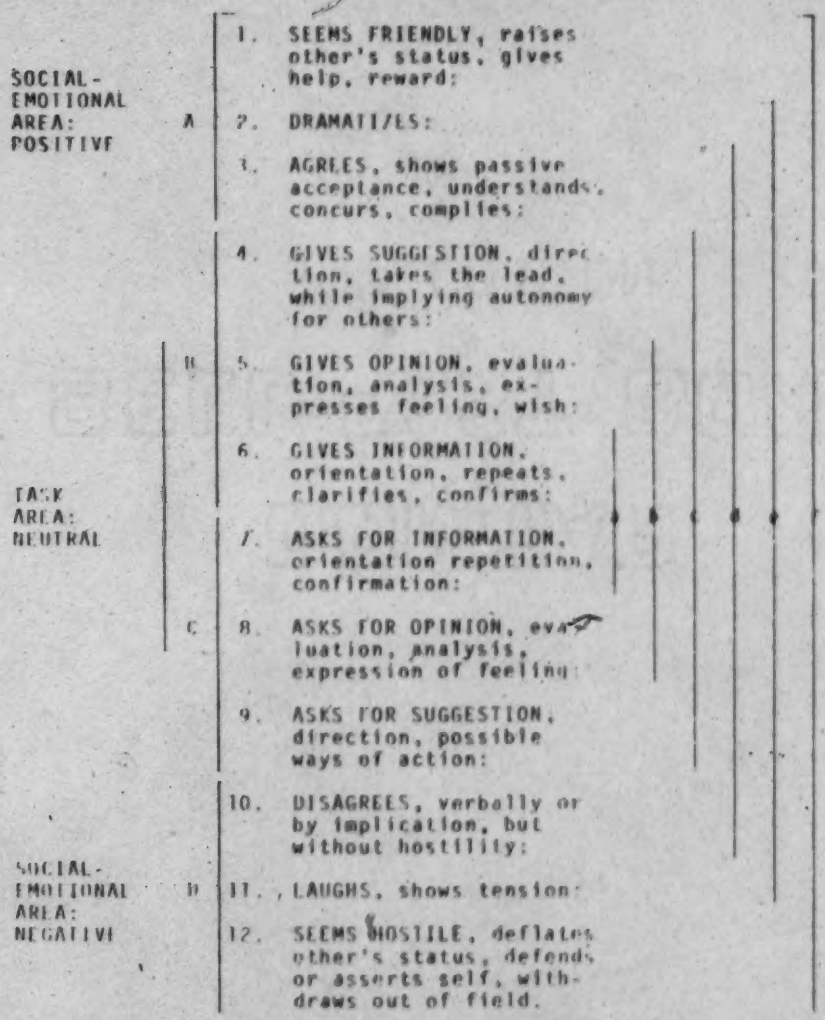
> The specific heritage that determined much of our effort is the tradition of systematic observation of group phenomena and, specifically, the work of Robert F. Bales (1950) (Mann, 1967, p. 2).

Basically it was devised as a way of classifying direct, face-to-face interaction as it takes place, act by act, in small group laboratory settings.

Bales sees groups as having two basic tasks to perform: (1) to solve the objective problem to which the group is committed, and (2) to build, strengthen and regulate the group life. Thus, all group activities are directed to task goals and system goals. It is assumed that each act of each individual can be analyzed with regard to these activities. The object of the analysis is the reconstruction of the social structure within the group by means of scoring every "who-to-whom" interaction in one of twelve categories (see Figure 7). Both verbal and nonverbal behavior are scored and represent sets of mutually exclusive, all inclusive behaviors, if the observer follows Bales' postulates. The three postulates

FIGURE 7

BALES' SYSTEM: INTERACTION PROCESS ANALYSIS (IPA)


SOCIAL-EMOTIONAL AREA: POSITIVE
A
1. SEEMS FRIENDLY, raises other's status, gives help, reward:
2. DRAMATIZES:
3. AGREES, shows passive acceptance, understands, concurs, complies:
4. GIVES SUGGESTION, direction, takes the lead, while implying autonomy for others:
B
5. GIVES OPINION, evaluation, analysis, expresses feeling, wish:
6. GIVES INFORMATION, orientation, repeats, clarifies, confirms:
TASK AREA: NEUTRAL
7. ASKS FOR INFORMATION, orientation repetition, confirmation:
C
8. ASKS FOR OPINION, evaluation, analysis, expression of feeling:
9. ASKS FOR SUGGESTION, direction, possible ways of action:
10. DISAGREES, verbally or by implication, but without hostility:
SOCIAL-EMOTIONAL AREA: NEGATIVE
D
11. LAUGHS, shows tension:
12. SEEMS HOSTILE, deflates other's status, defends or asserts self, withdraws out of field.

KEY

A Positive Reactions	a Problems of communication
B Attempted Answers	b Problems of evaluation
C Questions	c Problems of control
D Negative Reactions	d Problems of decision
	e Problems of tension reduction
	f Problems of reintegration

are: (1) consider total set of categories as a gestalt, (2) score continuously, and (3) score all persons in the group. The result is about 1000 scorable acts per hour session.

The IPA observational system has been used to study interaction patterns within sessions and over series of sessions (Bales and Strodtbeck, 1951; Heinicke and Bales, 1953). These studies established that "within sessions" there was a tendency for problem solving groups to move from problems of "orientation" to problems of "evaluation", to problems of "control". The "over sessions" studies revealed similar patterns and there tended to be a drop in emphasis on task activity over time, while social-emotional behavior increased.

(2) Mann's (1967, 1970) Member-Leader Observational System (M-L)

The aim of Mann's (1967) Member-Leader (M-L) observational system was to:

> ...bring together and build upon two traditions in the study of small groups: (1) the clinical study of long-term, self-analytic groups, such as therapy, training, and classroom discussion groups, and (2) the systematic observation of group interaction by means of act-by-act scoring of individual behavior (Mann, 1966, p. 85).

The system was devised for the purpose of examining the member-leader relationship throughout the entire development of the group by means of systematic observations of members' feelings, using concepts which have been employed in the

clinical and theoretical literature (as reviewed in the first part of this chapter). It is designed to assess and record the implied feelings of a group member toward the leader. That is, only those meanings of the act which are relevant for the member-leader relationship are scored.

The unit of analysis for the M-L system is the act, which Mann (1967) defines as, "...a single speech or bout of sentences within which the expressed feelings are uniform" (p. 61). The end of an act is determined when: (1) the speaker is interrupted, or (2) the speaker shifts from expressing one set of feelings to expressing feelings which call for a different array of categories. Mann's system averages 200 verbal acts per hour session.

When scoring the acts, there are two coordinates to consider; "level" and "category". Level refers to "...the process of symbolization, each level representing a distinct kind of decoding which enables the scorer to match the manifest and latent content and to specify which symbols stand for the leader and which for the member who initiates the act" (1967, p. 36). This is designed to recognize that individual expressions or acts vary considerably, from the most direct and deliberate expressions of feelings toward the trainer, to indirect, disguised or inadvertent feelings. Thus, a member's act is examined to determine the kind of inferences which are needed to connect it with the expressed feeling (category). To determine which of the four levels of inference to record, the observer must locate the leader

and locate the member in context of the act. In other words, the four levels recorded represent ways that a member can express his feelings toward the leader. In summary they are:

LEVEL ONE: This involves a direct expression of feeling toward the leader where both member and leader are referred to directly (e.g., "I feel annoyed at the leader for not telling us more about the assignment."). Here the number clearly identifies himself as the possessor of the feelings being expressed and the leader as the object of the feeling.

LEVEL TWO: This level refers to acts in which the leader is not clearly identified as the object but is symbolized by an equivalent within the group. This happens when the object (leader) is not mentioned, (e.g., "I feel annoyed today.") or when the object is the group as a whole or another member who serves as the symbolic equivalent of the leader (e.g., "Why isn't anybody speaking." or "I am annoyed at James because he is so aggressive."). Here, again the member identifies himself as the possessor of the feeling.

LEVEL THREE: At this level, the member refers to himself as possessor of the feeling, but symbolizes the leader with an equivalent outside the group (e.g., "I felt very threatened by a teacher I had in high school."). The member who initiates acts at level three does so because he is less exposed for having expressed a given feeling than at levels one or two.

LEVEL FOUR: Here the member may be symbolized by an equivalent inside or outside the group, and the leader re-

ferred to either directly or symbolically. That is, the member disguises or symbolizes himself, but not necessarily the leader (e.g., "Carl Rogers would probably disagree with you."). The member can express his feelings by treating them as if they belong to some other agent.

The first task, then, in scoring an act is to determine what links exist between the member and the object to whom the feelings are attributed, and between the leader and the object toward which the feelings are expressed. In the ordinary flow of communication, the connections between manifest content of an act and its meanings and implications for the here-and-now are seldom fully explicit. It is the scorer's task to reconstruct these "equations" on the basis of somewhat fragmentary evidence.

The next problem is to describe and record the actual feelings expressed. Mann uses sixteen categories, eight of which describe the affective response (impulse area), three which describe feelings activated by the leader's perceived status (authority relations area), and five which describe the member's feelings about himself in relation to the leader (ego state area) (see Figure 8, for an outline of the content categories, and Appendix A, for a description of the same categories). The impulse area is divided into the two sub-areas of hostility and affection, and the ego state area is divided into the sub-areas of anxiety and depression. The authority relations area is considered one of the five sub-areas. An act may be scored in as many sub-

FIGURE 8

MANN'S (1967, 1970) MEMBER-LEADER CONTENT CATEGORIES

		Level			
		1	2	3	4
IMPULSE AREAS	HOSTILITY:				
	1. Moving Against				
	2. Resisting				
	3. Withdrawing				
	4. Guilt Inducing				
	AFFECTION:				
	5. Making Reparation				
	6. Identifying				
	7. Accepting				
	8. Moving Toward				
AUTHORITY RELATIONS AREA	9. Showing Dependency (Showing Counter-dominance for leaders)				
	10. Showing Independence				
	11. Showing Counter-dependency (Showing Dominance for leaders)				
EGO STATE AREAS	ANXIETY:				
	12. Expressing Anxiety				
	13. Denying Anxiety				
	SELF-ESTEEM:				
	14. Showing Self-Esteem				
	DEPRESSION:				
	15. Expressing Depression				
	16. Denying Depression				

areas as seems appropriate, but no more than one category within a sub-area may be used.

The group leader can also be scored in terms of the sixteen categories. Mann's (1967) original system stipulated that the leader be scored in terms of his reflections of member feelings, but later (1970) made provisions in the categories for scoring the leader's feelings toward members.

The system also yields five sequential "phases" of group development. In summary, they are as follows:

Phase I: "Initial Complaining" is characterized by personal frustrations, anxiety, and expressions of hostility among members. The group tends to test limits and find various ways to manage the new situation. Tension frequently develops between members who seek nurturance and those who strive for control, and the level of anxiety is usually high.

Phase II: "Premature Enactment" is basically a re-evaluation of instructor-peer relationships. It is characterized by a brief and usually unsuccessful confrontation with the leader. Members often begin to reveal how vulnerable they feel, some in a dependent manner, others with hostility.

Phase III: "Confrontation" is the stage concerned with rebellion or independence. It involves a direct and hostile encounter between the group members and the leader over the ambiguity of the control issue inherent in the task at hand. The dependent members tend to accuse the leader of not fulfilling their dependency needs, while other members

tend to accuse him of having too much control over the members.

Phase IV: "Internalization" is the work-oriented phase. Members begin to share the leader's definition of work and the authority or control issue is largely replaced by task concerns. There is a tendency to reflect on the group process and it is not unusual for the leader to be accepted as a peer.

Phase V: "Separation and Termination" is dominated by concerns with the termination of the group. The most notable process during this phase is mounting depression and feelings of failure. Concerns with grades and exams are common, as are expressions of sadness and loss.

A recent study by R. Bedecki (1972) investigated group process using Mann's Member-Leader Observational System. It involved the analysis of two Self Analytic (SAT) and two Direct Communications (DCT) groups. The purpose was to determine the "psychological structure" of the two treatments, using factor analysis as the statistical technique, and to describe the "group process" and "phase movement" of each group separately using analysis of variance techniques. The results of the factor analysis illustrated that each treatment (SAT and DCT) had a unique psychological structure. The analysis of variance indicated that group process and phase movement are "group-specific" and "treatment-specific". He demonstrated that Mann's M-L system readily lends itself to a descriptive account of group development and makes it

possible to interpret the various member-leader relationships and their function in enhancing or hindering the understanding of group process.

Summary

It is with the phase movements described by Mann (1967, 1970) that the present study is largely concerned. Mann's studies indicate that these phases occur under various "non-directive" leadership styles, but emphasized the necessity for both "task" and "effective" facilitation. He made no attempt, however, to study these two functions in isolation. Examination of the phase movements that result when these two functions are artifically separated is the focus of this study.

CHAPTER III

PROCEDURE

This investigation involves the analysis of continuous changing relationships between member and leader in learning groups. The major research question is the extent to which leadership style influences these relationships. More specifically, how does a "task-oriented" leadership style affect the member-leader relationships, as opposed to a "social-emotional" leadership style? What are the behavioral differences between a leader who facilitates task, and one who facilitates social-emotional interaction? How do these particular leadership orientations affect the "phase movements" of a group in terms of time spent in each phase and number of phases completed? Is one leadership style more "effective" than the other, or are they both wanting in some aspects?

The recent study by R. Bedecki (1972) reviewed in Chapter II, clearly indicates that meaningful comparisons can be made between groups using Mann's (1967, 1970) Member-Leader (M-L) Observational System. The present study is modelled on Bedecki's M-L study of group process - in particular the procedures for the analysis of phase movement.

The Sample and Research Design

The sample consisted of 26 undergraduate students who formed one of the Educational Psychology 421 (1973, winter session) classes offered by the Department of Educational Psychology at the University of Alberta, Edmonton, taught by a male instructor and a female teaching assistant. The author was a research assistant for the instructor at the time and was given permission to use the audio tapes and questionnaires produced during the course for this study. The class consisted of 14 females and 12 males, ranging in age from 21 to 27 years, with a mean age of 23.2 years. All were registered in the Professional Diploma After Degree (P.D.A.D.) program and all had completed at least three years of university. Only two students had had previous teaching experience and most had completed less than two other half-year courses in Educational Psychology.

Educational Psychology 421 is described as, "Personal and Social Dynamics in Education". The course was designed for teachers-in-training and attempts to create a kind of classroom climate in which students influence each other and the teaching staff; where norms are supportive for getting academic work done as well as for maximizing individual differences; where communication is "helpful" and open; and where the processes of working and developing as a group are relevant in themselves for study.

For this particular class, the theme of the course was the study of leader-member relationships under various

leadership styles. To exemplify the need for teachers to provide both "task" and "social-emotional" facilitation in the classroom, the students were asked to divide themselves into two groups of 13 and choose the leadership style they would prefer to work under. The students first divided themselves into four small "work" groups which would meet once a week without a leader to work on a term project. Each "work" group then decided which leader they would prefer and joined with another small group to form the larger "interaction" groups. The instructor was chosen to be the leader of Group 1 and attempted to maintain a task-oriented leadership role. The teaching assistant was chosen by the students to be the leader of Group 2 and attempted to maintain a social-emotional leadership role.

The groups met for one hour, twice-weekly, in a conference room with an adjoining observation room. For the first half-hour one group interacted while the other group observed, and for the second half-hour the arrangement was reversed. The groups met this way on twelve occasions. Students were asked to make observational notes on their own group's behavior and on the group being observed for use in a group term project. They were also asked to keep daily diaries of their personal reactions for use in a personal term project. Audio tapes were made of each session which students could use as additional reference material.

Instruments and Scoring Procedure

At the end of every session the students completed a brief questionnaire that rated the leader-member relationships for that session. The questionnaire consisted of 15 words or phrases describing personal attributes of the leader. Five of the attributes were considered "power" oriented (P), five were "affection" oriented (A), and five were "task" oriented (T). The items appeared in random order with no indication as to which area they belonged. The students were asked to decide to what degree the various descriptions applied to the leader during that session.

This questionnaire was designed by the instructor and was based originally on the research of G.L. Cooper (1969). Cooper studied trainer attractiveness in terms of power, affection, and task, and how these dimensions influence changes in member attitudes. The questionnaire was developed over the three previous semesters by collecting various words and phrases used to describe leader behavior and submitting them to three different classes. This procedure established consensual validation of which descriptive items applied to which of the PAT dimensions. The phrases with the highest frequency were chosen, and from an original list of 150 items, the five highest were chosen for each dimension. For this study, the results of the questionnaire were used to define the behavioral differences between the two leadership styles in question (see Figures E1 and E2), and to provide further data to validate the PAT factors inherent in the question-

FIGURE 9

ITEMS FROM THE PAT SCHEDULE OF MEMBER-LEADER RELATIONSHIPS QUESTIONNAIRE

P Items	A Items	T Items
Dominating	Warm and understanding	Businesslike
Outspoken	Sincere and devoted	Can summarize well
Manages others	Appreciative	Knowledgeable
Able to give orders	Eager to get along	Productive
Forceful	Tender and unselfish	Interprets information and makes diagnoses

FIGURE 10

EXAMPLE QUESTIONS FROM THE PAT SCHEDULE OF MEMBER-LEADER RELATIONSHIPS

	Strongly Applies	Applies Somewhat	Applies a Little	Does Not Apply at All
6. Sincere and Devoted	4	3	2	1
7. Outspoken	4	3	2	1

naire (see Table E1).

The instrument for analyzing group development was Mann's (1967, 1970) Member-Leader (M-L) Scoring System. Typed manuscripts were made from the audio tapes and then scored by the author according to Mann's M-L system as described in Chapter II. The teaching assistant for the course and the author spent approximately 35 hours training for reliability in the use of the M-L system. During training a few supplementary scoring rules were established where Mann is sometimes vague about how to interpret certain types of dialogue, to ensure consistent scoring, and to accommodate the uniqueness of the groups under observation. Brief summations of these scoring rules are contained in the following six paragraphs.

(1) Only when a member's act had been scored as "Identifying" could another member's response to that act be scored as "Moving Against" or "Moving Toward (e.g., Member #2: "I'm wondering how you (Member #14) felt about that." Member #14: "I felt that I knew you better after that incident and that was good.").

(2) Although group laughter was never scored, laughter contained in a dialogue was always scored in the anxiety area.

(3) Group laughter was considered an interruption and signified the end of an act.

(4) "Identifying" was scored for the leader when he shared his personal feelings with the group (e.g., "Because

what happens for me when I experience a lot of tension, my perceptions get blurred.").

(5) Silences were not scored except in terms of how they seemed to affect the act initiated immediately after the silence.

(6) Contrary to Mann's scoring rule which states that no more than one category from each sub-area can be used to score a single act, "Anxiety" and "Denying Anxiety" were double-scored when the content expressed denial of anxiety but the manner of expression indicated anxiety (e.g., "That - uh - that - that really doesn't bother me - uh - at all.").

To ensure scoring reliability, the teaching assistant independently scored ten sequential acts chosen at random from each half-hour session. The first taped half-hour sessions for each group were used as training material, leaving a total of 180 acts to compare with the author's scoring. The results of the inter-scorer reliability are discussed in Chapter IV.

Data Preparation

All sessions for both groups were tape recorded. Unfortunately, the recordings of two sessions in each group (sessions #1 and #5) were unusable because of failures in the recording apparatus. This left a total of ten half-hour sessions for each group available for analysis. The audio tapes were converted into typed manuscripts and scored according to Mann's M-L Scoring System. These data were trans-

cribed to computer sheets and key-punched for analysis.

A computer program* was used to summarize the M-L data in a statistically useful way. An outline of its contents follows:

(1) frequency tables of acts by each person (over sixteen categories and four levels) in each session and over all sessions;

(2) tables of proportions of acts by each person (over the sixteen categories separately and four levels separately) in each session and in overall sessions;

(3) the punching of the 'proportions data' on cards, which could be used for further analysis.

There was one transformation of the frequency data. The acts were scaled across the sixteen categories so that they represented proportions summed to one: likewise the acts were scaled across levels. This procedure was designed to lessen the disparity between high and low participants.

To analyze and compare the phase movements, the data were subjected to one-way and two-way analyses of variance and four levels of trend analyses.

Summary

Upon attaining competency in the use of Mann's system

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* The design of this program was outlined by R. Bedecki (1972), and programmed in Fortran by Mr. Don Seidle of DERS, U. of A. The program is available in the DERS library - Test 14.

of categorizing the on-going group interaction in relation to the leader and submitting these data to statistical analysis, it was hoped that the questions posed in this chapter could be answered in a systematic and relatively objective manner. Mann's descriptions of the sixteen categories are certainly comprehensive, but individual differences in interpretation are inevitable. To help minimize this problem, extensive training preceded the scoring in order to approximate Mann's level of the inter-scorer reliability (see Appendix C). His procedure for establishing reliability is somewhat vague at times but his suggestions were followed as closely as possible.

CHAPTER IV

RESULTS

The data for the study of phase movement were derived from coding each of the two groups across ten 30-minute sessions according to Mann's M-L scoring system. Inter-scorer reliability for acts was 86.6% agreement for Group 1 and 97.5% agreement for Group 2. The agreement on level of inference for Group 1 was 82% and 97.5% for Group 2. Average percentage agreement on categories was 81.1% for Group 1 and 73.9% for Group 2. For a detailed account of the inter-scorer reliability for Mann's (1967) studies and the present study, see Appendix C.

One group worked with a "task" oriented leader (Leader 1) and the other worked with a "social-emotional" leader (Leader 2).

Group	Participants	Sessions
#1 (task leadership)	n=13	1-10
#2 (social-emotional leadership)	n=13	1-10

The frequency data obtained from these groups were standardized across the 16 categories (i.e., proportionalized).

The base number was the total number of acts scored by each member in a particular session.

A one-way analysis of variance (ANOVA) with 10 repeated measures was computed on each of the two groups separately to isolate the statistically significant variables (categories). A two-way ANOVA with 10 repeated measures was then computed on the two groups combined to isolate the categories that varied significantly between the groups. Four tests for trends (linear, quadratic, cubic, and quartic) were computed for each group to determine the statistically significant trends. The results of this analysis were used to estimate the number of phases which occured over the ten sessions, and also the entry and duration of each phase. Trend tests were also computed for the two groups combined to indicate whether or not the trend of the time sequence (sessions) means were of the same form for the two groups. The means from the one-way ANOVA for each group were then converted to Z scores and plotted over the 10 sessions for each category (Figures B1 to B4 and B10 to B13). Correlation matrices for the means were also computed and those with high negative and positive correlations ($p < .05$) were also plotted (Figures B5 to B9 and B14 to B17) to facilitate the analysis. For a detailed description, explanation, and rationale for this statistical design, see Bedecki (1972), Chapter V.

Results of the Analysis of Variance and Tests for Trends (Estimate of Phase Movement)

Table B1 summarizes the one-way ANOVA computation for category #1, Moving Against, where the data are from Group 1. Table B2 gives the "Coefficients in Tests for Trend" and the "Summary Analysis of Variance of Trends". Table B3 summarizes the two-way ANOVA computations for category #1, Moving Against, where the data are from both groups. Table B4 presents the "Coefficients in Tests for Trend" and the "Summary of the Analysis of Variance of Trends". Both of these tables are for explanatory and illustrative purposes only. The rest of the data for this study will be presented in a more highly summarized form.

The criteria used in the estimation of the number of phases for each group were the following:

(1) a significant ($p < .10$) F-ratio of the overall one-way ANOVA

(2) a significant ($p < .10$) F-ratio of the one-way ANOVA of linear, quadratic, cubic, or quartic trend.

The first criterion was used as the basis for the estimation of statistically significant variation. The overall F-ratios for each category are presented in Table B5 for Group 1 (task) and in Table B6 for Group 2 (social-emotional). The reason for using the second criterion was to specify the direction of those categories that vary significantly over the 10 sessions. For example, categories showing a significant F-ratio for linear trend indicates that one phase could adequately describe the data; categories showing a signifi-

cant F-ratio for quadratic trend indicates that two (cubic... three, and quartic... four) phases could adequately describe the data. Whenever more than one solution was available, the quartic solution was selected.

(1) Group 1 - Task Group

Examination of the ANOVA F-ratios for Group 1 (Table B8) shows the following nine categories were statistically significant ($p < .10$):

#1-Moving Against	#7-Accepting	#10-Independence
#2-Resisting	#8-Moving Toward	#12-Expressing Anxiety
#3-Guilt Inducing	#9-Dependency	#16-Denying Depression

Of these nine categories, one (#16) manifested a significant linear trend, three (#1, #4, #12) significant quadratic trends, two (#2, #12) cubic trends, and five (#1, #2, #7, #12, #16) quartic trends. The profiles of the means (converted to Z scores) for these data are found in Figures B1 to B4. The best estimate for the number of phases is the quartic trend (four phases). Unfortunately, this statistical design provides for the possibility of four (quartic) phases, and in the case of Group 1, it is apparent from the plots of significant categories that five phases describe the data more accurately. Therefore the criteria for the number of phases determined for Group 1 was taken past the statistical information provided. The best estimate for the start and

duration of the five phases, however, is based upon the plots of the categories with significant quartic trends. The corresponding phase and time intervals are as follows:

Phase	I	II	III	IV	V
Session	1	2,3	4,5,6,7	8,9	10

(2) Group 2 - Social-Emotional Group

Examination of the ANOVA F-ratios for Group 2 (Table B9) shows that the following six categories were statistically significant ($p < .10$):

#2-Resisting	#4-Guilt Inducing	#12-Expressing Anxiety
#3-Withdrawing	#11-Counterdependence	#16-Denying Depression

Of these six categories, two (#2, #4) manifested significant linear trends, no significant quadratic trends, one (#11) significant cubic trend, and two (#3, #12) significant quartic trends. The profiles of the means (converted to Z scores) for these data are found in Figures B10 to B13.

The data for Group 2 did not yield a large number of significant F-ratios for trend, and it could be argued that there is minimal evidence to establish phase movement. However, the author believes that the significant quartic categories provide sufficient evidence to establish four phases to describe the movement in Group 2. This decision is based on the study by Mann (1967) where one factor (small cluster

of highly correlated categories) was frequently used to determine phase movement, and Bedecki's (1972) study where the phase movement for one group was determined by two significant quartic trends, even though there were larger numbers of significant quadratic and cubic trends. Thus, the best estimate for the start and duration of the four phases were based on the plots of the categories with significant quartic trends. The corresponding phase and time intervals are as follows:

Phase	I	II	III	IV
Session	1	2,3,4	5,6	7,8,9,10

(3) Comparison of Group 1 and Group 2

The following table depicts the two groups over 10 sessions. It is apparent that the phase movement for the two groups is remarkably different.

The results used to compare the profiles for the two groups were the statistically significant F-ratios ($p < .10$) for the two-way overall ANOVA A x B (groups x sessions) interactions and the A x B linear, quadratic, cubic, and quartic interactions (Table B10). A significant F-ratio indicates that the various components of the trends for the two groups differ significantly. These categories were:

TABLE 1

PHASES AND CORRESPONDING SESSIONS FOR GROUP 1 AND GROUP 2

Phases	I	II	III	IV	V
Group 1	1	2,3	4,5,6,7	8,9	10
Group 2	1	2,3,4	5,6	7,8,9,10	

#1-Moving Against	#7-Accepting	#10-Independence
#2-Resisting	#8-Moving Toward	#11-Counterdependence
#4-Guilt Inducing	#9-Dependency	#12-Expressing Anxiety

Of these, the quartic components differed significantly for categories #1, #2, #7, and #12. The profiles of these categories are plotted in Figures B18 to B20.

(4) The Leaders

Member-leader relationships in a group are invariably influenced by the behavior of the leader. To help clarify each leader's effect on the groups, they were also scored according to Mann's (1970) M-L scoring system. Because of the limited number of observations available, the analysis of variance and tests of trend were not computed. The results are, instead, based on frequency counts and proportions data.

For Leader 1 (task) the results showed that approximately 59% of the acts initiated were scored as Dominating (leader version of Counterdependence), 5% were Independence, 10% were Expressing Anxiety, 12% were Accepting, 5% were Resisting, and 4% were Guilt Inducing. The remaining categories all revealed percentages under 1% (Table D1). In contrast, approximately 31% of the acts initiated by Leader 2 (social-emotional) were scored as Dominating, 17% were Independence, 16% were Expressing Anxiety, 1.5% were Counter-dominant (leader version of Dependency), 6% were Moving Toward, 12% were Accepting, 2% were Identifying, 3% were Guilt

Inducing, and 5% were Resisting. The remaining categories were less than 1% (Table D2). In summary, Leader 2 spent less time in the Authority Relations area - in particular Dominating - and made more frequent use of the Impulse Area.

Correspondingly, the acts initiated by Leader 1 were less direct than Leader 2. The analysis of Levels of Inference shows that 26% of the acts initiated by Leader 1 were at Level One, 17% at Level Two, and 55% at Level Four. In contrast, 44% of the acts initiated by Leader 2 were at Level One, 24% at Level Two, and 34% at Level Four. The proportions of acts initiated at Level Three was negligible for both leaders (Tables D3 and D4). The difference in proportions of acts initiated at Level One is important because it reflects Leader 1's attempts to ignore acts where feelings may be expressed directly, and Leader 2's attempts to facilitate those acts.

The differences between the two leadership styles is further verified by the results of the PAT Schedule of Member-Leader Relationships described in Chapter III. The members of Group 1 consistently rated their leader higher on Task attributes than on Affection, and the reverse was true for the ratings from Group 2. The means of the ratings for each session are plotted in Figures E1 and E2.

To enrich the above statistical descriptions of the leaders' behaviors is the following summary of some clinical and personal observations made by the author and some of the students involved in the course. Leader 1 consistently

(1) reinforced acts relating to the task

(2) ignored acts involving feelings

(3) always spoke first in the session

(4) did not express his own feelings or respond to questions about his feelings

(5) did not attempt to alleviate conflict or anxiety

(6) introduced task assignments during the sessions

(7) never called anyone by name.

Leader 2 consistently

(1) reinforced acts where direct feelings were expressed

(2) redirected acts relating to things outside the group to here-and-now feelings

(3) expressed personal feelings

(4) tried to alleviate feelings of conflict and anxiety by encouraging members to discuss them

(5) usually let a member begin the session

(6) did not introduce task assignments

(7) made an attempt to address everyone by name.

Analysis of Group Development

The framework for the discussion of each group's development will be the phases derived from the statistical analysis. To illustrate the Member-Leader relationships characteristic of each phase, a broader use of the categories is made. The criteria that determined which categories would be selected were as follows:

(1) a significant F-ratio of the overall one-way ANOVA for each group

(2) a significant F-ratio of the one-way ANOVA OF trends

(3) a significant positive or negative correlation with the categories selected for phase determination (Figures B5, B6, B14 and B15).

To facilitate the statistical description of the phase movement, this section includes the author's personal observations and actual content of the sessions, where appropriate. Hopefully, this verbal account will help clarify the statistical account.

The groups were generally treated as a single entity. For example, when the group is reported to be "high" on Dependency and "moderate" on Counterdependency, it does not mean that every member of the group contributes to the "high" or "moderate" values on these categories; but rather that the emotional tone of the group fluctuates in the Authority Relations area during this phase. That is, individuals and sub-groups may or may not be ambivalent about a certain area, but more important, ambivalence is characteristic of the group during this phase.

(1) Group 1

To assist in the understanding of the following discussion of group process in Group 1, a look at Table B8 and Figures B1 to B4 is suggested. These figures plus Table 2 depict the phasic character of Group 1 and should add visual verification to the verbal account.

(a) Phase I

During Phase I (session 1) the statistically signifi-

TABLE 2

CHARACTERISTICS OF THE M-L CATEGORIES

BY GROUP 1

Phase	I	II	III	IV	V
Sessions	1	2,3	4,5,6,7	8,9	10
Significant Categories					
# 1-Moving Against	M-	H+	S-	S+	M-
# 2-Resisting	H+	M-	S-	S-	M-
# 4-Guilt Inducing	M-	H+	S-	S-	H-
# 7-Accepting	H-	H+	S-	S-	S-
# 8-Moving Toward	S-	S-	S-	H+	S-
# 9-Showing Dependency	M+	S+	S+	S-	M-
#10-Showing Independence	S+	S+	S+	S+	H-
#12-Expressing Anxiety	M-	H+	S-	S-	M-
#16-Denying Depression	S-	S+	S-	S-	H+

(Z score values have high, moderate, or slight deviations from the mean in a positive or negative direction.)

Slight (S±) Z score value 0 - .5 standard deviations from group mean.

Moderate (M±) Z score value .5 - 1.0 standard deviations from group mean.

High (H±) Z score value 1.0 - 2 standard deviations from group mean.

cant categories of Resisting, Dependency and Independence were activated while the other significant categories were neutralized. Since the scored sessions actually begin with the second session (the first session was not tape recorded) the group behavior in Phase I also includes the carry-over effect from that initial session. The group members responded to the initial meeting in a rather silent, compliant manner, with a noticable amount of anxiety evident. Members tended to display dependent behavior and anxiety seemed to focus on the observers, the tape recorder, and clarification of task. After the session the members' personal comments indicated anger, frustration, confusion, and vagueness. The theme of the following session (session 1) centered around the task (group term project) and the purposes of the group and there were fluctuations in the Authority Relations area. A few members appeared ready to accept the situation and already had some independent ideas about work patterns. These members tended to respond to other members in a leader-like manner (Identifying) and attempted to help others clarify their goals and objectives (Independence). The majority of the members, however, responded in a dependent manner toward the leader, resisted the suggestions of the other members and resisted the idea that they were to form their own goals and work patterns. There was a tendency to express feelings of helplessness and inadequacy (Depression). Some members attempted to clarify the leader's role, expressed surprise at his unwillingness to "nurture" them, and there were some

rumblings of rebellion.

In spite of the apparent frustration expressed during the session, the personal comments made after the session were quite optimistic:

(1) "More helpful today - gave further direction."

(2) "Improving - felt better."

(3) "Felt easier - a bit more directed - more involvement."

The members seemed to perceive the leader as fulfilling their dependency needs and the feelings of anger and frustration from the first session were subsided. The group responded almost entirely on Level Four, (see Appendix F for tables and graphs depicting levels of inference), which suggests that this was their way of avoiding anxiety (which was successful) and that the members were responding to the leader by assuming his level of inference which was also largely Level Four. Phase I was basically an orientation phase where members attempted to test the limits of the situation. It was characterized by a mixture of vagueness, frustration, and hopeful anticipation.

(b) Phase II

During Phase II (sessions 2 and 3) the Impulse Area and the Authority Relations area were activated as was Expressing Anxiety. There was a general expression of hostility and resentment because the leader was not going to fulfill their expectations. There was ambiguity in both the

Authority Relations area and the Impulse area, suggesting that in spite of some disappointment, the dependent members were still willing to support the leader's role. It should be noted that this was the beginning of a split in the group that is characterized throughout the group life and is a continual source of conflict and frustration.

Throughout this phase there were complaints and accusations accompanied by a high level of anxiety. One sub-group blamed the leader for inhibiting the group and manipulating members (Moving Against and Guilt Inducing). Other members, however, expressed their desire to accept the leader in his role and assured the others that he would not let them down.

This phase corresponds to what Mann (1967) calls "Premature Enactment". That is, a weak and usually unsuccessful confrontation with the leader. He reports that this phase is characterized by high anxiety, hostile reactions by some members, but counteracted by support of the leader by those who still see him as benevolent. There is a tendency by hostile members to belittle the supportive, anxious members. This corresponds with the high scores in Denying Anxiety found during this phase. There was also some animosity between the dependent, compliant members and a few members who preferred autonomy.

When there is ambiguity in the Authority Relations area, as there was during this phase, the leader can become vulnerable to what Shepard (1961) refers to as the "Dependency Seduction" or the "Counterdependent Trap". In this

case, the leader responded to neither temptation and left most members in a state of frustration. The personal comments at the end of the phase corresponded with the feelings expressed during the sessions:

(1) "Frustrated as hell."

(2) "I was uncomfortable due to the problems related to the lash, (confrontation) which this situation fosters - experienced conflict."

(3) "Accept his (leader's) role."

(4) "Leader is still the major focus and I feel that the group could go ahead and work if we weren't so concerned with being directed."

(c) Phase III

Phase III (sessions 4,5,6,7) was an exceedingly complex phase. The group scores were neutralized in most categories because of frequent reversals within sessions and from one session to the next. There were two basic themes throughout the phase, neither of which was brought to any satisfactory completion in terms of movement for the group. The first theme was work, which was invariably the initial topic for all four sessions in this phase. However, the work theme was constantly being frustrated by repeated attempts at confrontation with the leader. The confrontation was, in turn, not successful because of a sub-group that insisted on supporting the leader and squelching every confrontation attempt. This conflict is evident in the rapid reversals of Dependency and Counterdependency. The confrontations with the leader were attempts to reduce the ambiguity of the

leader's control (Mann, 1967) but the dependent supporters made the reduction of ambiguity for the group impossible. Perhaps a brief summary of the content of each session in this phase will clarify its character.

Session 4 was carried largely by a number of anxious dependent members who insisted on clarification of the task. These members showed very little change from the initial sessions and continued to ask for the same kinds of information. The other members tended to remain silent except for the occasional Independent comments concerning the task. The personal comments after the sessions were rather neutral:

(1) "No strong emotional reaction."

(2) "Totally relaxed and comfortable throughout."

(3) "Leader trying to outline topics more."

Session 5 focused on the task and was again characterized by Dependency and Anxiety. The session ended with a general tone of dissatisfaction and a suggestion that perhaps there was a need for some social-emotional facilitation from the leader, and resulted in a rapid increase in Withdrawal and Anxiety. The personal comments were generally negative:

(1) "Hostile feelings."

(2) "Rudderless."

(3) "I'm bored to tears."

(4) "I feel he's (leader) getting fed up with us."

(5) "Ambivalent toward instructor."

(6) "Frustrated - I constantly feel that we are being manipulated."

Although these feelings were not expressed openly during the session, it is clear that many members were feeling dissatisfied and the following session provided the opportunity for some of these members to express themselves.

Session 6 began with the usual task orientation, but the group scored very high on Expressing Anxiety and Withdrawal. The concern, however, quickly moved away from task to focus on the leader and there was a brief Level One confrontation with him. The leader was accused of being without feelings and refusing to participate in the group. Suggestions of withdrawing from the interaction sessions were made in the form of indirect warnings. This time both subgroups united in their attack. The leader responded by redirecting them to the task and the group was left in a state of frustration. Personal comments following the session were:

(1) "Frustrated feelings."

(2) "Annoyance."

(3) "I have said all I thought."

(4) "Leader playing role of frustrator."

Session 7 began with a quiet discussion of an assignment given by the leader, but soon evolved into an evaluation of the course and the leader. It was suggested that the leader was, in fact, not a leader but merely one who frustrated the members' progress. This time the dependent, supportive sub-group quickly moved in to defend the course. The result was a rapid retreat by all to a discussion of a recent movie. The personal comments reflected the ambiguity of the

session:

(1) "Leader still frustrating the group."

(2) "Relaxed, comfortable."

(3) "Empathized with leader's role."

(4) "Leader should make more attempts to get interaction."

This phase had some of the characteristics of what Mann would call the "Confrontation" phase, but in reality was another unsuccessful "Premature Enactment" because the authority issue was not resolved by either sub-group. The phase was characterized by ambiguity in all areas, especially Authority Relations. The counterdependent members attempted several confrontations but these were almost always off-set by the dependent, supportive members. The few independent members in the group eventually grew impatient because they wanted to move on. They seemed more interested in co-existing with the leader than confronting him or depending on him, but they got little support from other members. Throughout the phase the group responded largely at Levels Two and Four, even during the confrontations. The leader verbalized almost entirely at Level Four, except for session 5 where Level One was high.

(d) Phase IV

Phase IV (sessions 8 and 9) is distinguished from Phase III by its notable reversals between sessions in the Impulse area and an initial tendency to respond at Level One.

The phase began with an attempt by the group to deal with its internal conflict over the perceptions of the leader. There were also gestures of apology to the leader and some qualifications of hostile statements made durfng the previous phase. The Authority Relations area was neutralized while the group tried to improve its internal communications. Feelings of self-esteem were expressed, laced with an increase in Expressing Anxiety and Expressing Depression about their inability to handle this problem.

This rather reflective period was brief, however, and the group again split on the issue of leadership. One sub-group blamed the leader for everything (Moving Against) while the other sub-group exonerated him and blamed themselves (Moving Toward and Expressing Depression). The dependent, supportive sub-group finally stated their unwillingness to be associated in any way with the opinions of the other sub-group. The topic of marks was discussed later in the phase, resulting in a rapid increase in Resisting, Independence, Dependency, and Counterdependence. At the same time the Ego State area was neutralized and Identifying increased. The neutralization of anxiety (Ego State area) was surprising, but is explained by Mann as the result of an increase in Independence which tends to neutralize a threatening environment.

Some of the personal comments at the end of this phase were reflective, while others were reminiscent of much earlier concerns:

(1) "Felt like all has been of no value - disillusioned."

(2) "Hostile."

(3) "Where and what have we been doing here?"

(4) "I feel confused and frustrated."

Because of the notable increase in Identifying and some attempts by the group to reflect on the group process, this phase corresponds to what Mann refers to as the "Internalization" phase. This is supported by an increase in Expressing Depression, Independence, and the neutralization of Expressing Anxiety. The period where the group discusses grades and evaluation, however, is more typical of the last phase of group life, which suggests that there is some overlap with the next phase.

(e) Phase V

Phase V (session 10) was unique because one sub-group withdrew entirely by not appearing for the session. This is a highly unusual occurrence at the end of group life and is more likely to be seen during earlier (confrontation) stages of the group. It could be viewed as the ultimate hostile, counterdependent act. The absent sub-group was generally hostile and counterdependent throughout the phases and perhaps this was their final attempt at resolution of the authority issue.

The sub-group that came to the session devoted their energies to expressing hostility toward the absent members,

and disassociating themselves from the feelings expressed by them. Denying Depression (blaming others) was very high, Making Reparation made a notable upsurge, as did Self-esteem and Withdrawing. The Dependence-Counterdependence issue was neutralized and expressions of Anxiety and Depression decreased.

This phase was what Mann would describe as the "Termination-Separation" phase in terms of the increase in Denying Depression, Withdrawal and a "re-hash" of the group process. It did not, however, contain the usual feelings of sadness and loss that Mann describes. There was some self-berating for not handling the other sub-group more effectively, but this was countered with expressions of Self-esteem about how well they had managed in spite of the other sub-group. The phase ended with an attempt to find out how the leader really felt about the progress of the group and general agreement that the course had been worthwhile. Underlying desires for praise and commendment were evident. The personal comments were generally positive and related largely to the absence of the other sub-group:

(1) "I felt relaxed."

(2) "Leader related well to us."

(3) "Other group absent - great."

(4) "Relieved that we did not have to meet with other group."

(2) Group 2

To assist in the understanding of group process in Group 2, a look at Table B9 and Figures B10 to B13 is suggested. These figures plus Table 3 depict the phasic character of Group 2 and should add visual verification to the verbal account.

(a) Phase I

During Phase I (session 1) the statistically significant categories of Expressing Anxiety, Resisting, and Withdrawal were activated while the Authority Relations area was neutralized. Again, the initial session was not tape recorded but must be considered to fully understand this phase. The initial session focused on getting acquainted, exchange of names and personal experiences in groups. The leader expressed a desire to help create a "family" atmosphere and a rule was established about discussing the other group. The comments following the initial session were very positive and optimistic:

(1) "Very pleasant leader."

(2) "Good experience."

(3) "Looking forward to class sessions."

(4) "Leader sincere and sympathetic."

The next session (session 1) was almost identical to the initial session. The group continued to get acquainted, relate personal experiences, followed by a brief discussion about communication skills. The leader verbalized almost

TABLE 3

CHARACTERISTICS OF THE M-L CATEGORIES

BY GROUP 2

Phase	I	II	III	IV
Sessions	1	2,3,4	5,6	7,8,9,10
Significant Categories				
# 2-Resisting	M+	H+	M-	M-
# 3-Withdrawing	S+	S+	M-	S+
# 4-Guilt Inducing	M-	M-	M+	S+
#11-Showing Counterdependency	M-	M+	M-	S-
#12-Expressing Anxiety	H+	M-	M+	S-
#16-Denying Depression	M-	S-	M+	S+

(Z score values have high, moderate, or slight deviations from the mean in a positive or negative direction.)

Slight (S±) Z score value 0 - .5 standard deviations from group mean.

Moderate (M±) Z score value .5 - 1.0 standard deviations from group mean.

High (H±) Z score value 1.0 - 2 standard deviations from group mean.

entirely at Level One and attempted to alleviate tension and anxiety by responding directly to members' feelings. The members, however, tended to respond at Levels Two and Four in spite of the leader's encouragement to respond directly. The personal comments at the end of the session were generally positive but revealed some concerns about silent members and personal involvement.

(1) "Anxiety at first but then totally relaxed."

(2) "Leader sincere and devoted."

(3) "Upset at some members being left out."

(4) "I tend to dislike the feeling of being forced to let everyone know about myself - phony."

The acquaintance process, the relating of other group experiences, and the high level of anxiety are typical of the initial phase of group life (Mann, 1967; McLeish et al., 1972). However, other characteristics were missing. There were no concerns about leadership, testing of limits was very superficial, dependency and complaining were not present, and the group displayed an almost euphoric optimism and commitment to the leader.

(b) Phase II

Phase II (session 2,3,4) began with most categories neutralized and ended the same way. During the middle of the phase there was a brief confrontation with the leader in the form of a suggestion that a "get-acquainted" session be held without her. This was accompanied by activation in

the Impulse area and an increase in Counterdependence. A few members perceived the group situation as "phony" (Resisting) but the majority supported the sincerity of the leader and quickly denied the hostility being expressed. Although there was a sincere effort made to deal with the dependency issue, the majority of members refused to even acknowledge it as a problem. It appeared that during the brief perfod of confrontation with the leader very few members expressed their true feelings. Although the majority of members verbalized positive support of the leader during the session, the personal comments suggested otherwise:

(1) "Leader seems over-reactive."

(2) "Frustrated at nothing being done."

(3) "Felt a definite tension."

(4) "The session left me totally frustrated."

(5) "I felt at the verge of anger toward the leader."

After the last session of this phase (session 4) however, the comments reverted to the usual positive, supportive theme:

(1) "Leader seemed understanding and concerned about our feelings."

(2) "Enjoyed session - felt involved."

(3) "Real productive - good session."

This phase was characterized by a brief and unresolved confrontation with the leader, or what Mann refers to as "Premature Enactment". During this phase all areas (except Ego State which remained neutral) moved from neutrality to

ambiguity and back to neutrality again.

(c) Phase III

Phase III (sessions 5 and 6) began with a session where the leader was absent and was characterized by notable reversals in the areas of Affection and Expressing Anxiety. During session 5 the discussion focused on the leader and progress of the group and was characterized by high anxiety ambivalence in the Impulse and Authority Relations area. The independent members tended to carry on as usual, the more dependent members complained about the leadership and expressed feelings of resentment toward the leader for not being there (Guilt Inducing), while the more counterdependent members expressed feelings of relief. The comments reflected the ambiguity of the group:

(1) "Relieved, freedom, relaxed without leader."

(2) "Felt a little lost without the leader."

(3) "The group was the same without her, indicating that she is more of a member than a leader."

When the leader returned for session 6, there was an increase in Accepting, Guilt Inducing, and Dependency. Most members displayed a dependent, supportive attitude characteristic of the initial phase. There was some complaining about the task, accompanied by some feelings of being "let down" by the leader. The personal comments following this phase were varied:

(1) "Frustrated and felt pressured for time."

(2) "Group beneficial and productive."

(3) "Leader becoming more of a member."

(4) "Leader warm and understanding."

(5) "Tension about project."

For some members there appeared to be a resolution of the dependency problem with the acceptance of the leader as a member, but for most both the theme and content of this phase were reminiscent of Phase I.

(d) Phase IV

During Phase IV (sessions 7,8,9,10) the Affection categories were neutralized while Independence, Dependence and the Hostility categories were activated. At some points during this phase the group attempted to establish work patterns. There were also expressions of disenchantment with the group. An unsuccessful attempt to establish a working agreement with Group 1 (session 7) seemed to leave the group feeling discouraged and somewhat apathetic (sessions 8 and 9). Typical comments after this part of the phase were:

(1) "Neutral feelings toward the leader."

(2) "Passive attitude."

(3) "Leader doesn't seem very influential."

(4) "Talking in circles."

It appeared that the group was almost ready to begin dealing with the reality of the situation but there would only be one session remaining and the effort would be futile.

As a result, the final session was a frustrating and superficial experience for most members. The group almost totally ignored the fact that the course was over and tended to discuss irrelevant issues outside the group. The leader strongly encouraged Level One interaction but this was ignored by the group who carried on at Level Four. Near the end of the session one member reminded the group of its termination but the group responded by Withdrawal. Personal comments reflected the group's discouragement and disappointment:

(1) "Frustrating session - nothing accomplished."

(2) "I felt badly that session ended on bad note."

(3) "I was disappointed in the session."

Even though there were four phases for Group 2, there was really very little movement for most members. It seemed to arrest at Phase II, touching only briefly on other phases, but invariably returning to Phase I and II concerns. The group seemed so intent upon maintaining good relations that it avoided conflict at all costs, thereby retarding its own growth.

(3) Comparison of the Two Groups

One of the most interesting areas for comparison was the differences in the use of the Authority Relations Area. Here the profiles of the two groups tended to show a negative relationship. Group 1 began with a relatively high activation in this area, while Group 2 was neutralized in this area. The beginning of Phase II for Group 1 showed a significant rever-

sal (neutralization) here, while Group 2 gradually increased in the use of all three Authority Relations categories. Counterdependence became prominent in Phase III for Group 2 (confrontation with the leader) but tended to fluctuate together with Dependence and Independence for Group 2 through the middle phases. This high ambivalence in Group 2 seemed to have prevented any real resolution of the authority problem. For both groups the last phase was characterized a reversal for all three categories from the first phase. Group 1's termination phase was characterized by neutralizing the Authority Relations Area while Group 2 ended with an activation of the Authority Relations area.

With regard to the Impulse Area, Group 2 appeared to allow more expressions of direct affection but not direct hostility. Group 1, on the other hand accepted direct hostility throughout but affection did not appear until quite late in the group life. In general, Group 2 tended to be a little more cautious and indirect in their use of the Impulse Area. This corresponds to their limited use of Level One expressions. They seemed to feel safer using Level Two, where the object of feelings expressed were not mentioned or were symbolized by another member of the group, and Level Four, where experiences outside the group were used to express hostility or affection. Group 2 made use of Level One expression almost exclusively during confrontations but relied on Level Four for most other expressions (Figures F1 and F2 for plots of proportions).

Expressing Anxiety was also negatively related for the two groups, which in turn had a negative correlation to the Authority Relations Area. That is, when the Authority Relations area was activated, Expressing Anxiety tended to decrease and vice versa. Group 1 began with low anxiety and ended that way, while Group 2 began high on anxiety and ended high.

CHAPTER V

DISCUSSION

Mann's (1967, 1970) Member-Leader observational system was used to analyze the development of two learning groups. The purpose was to discover if there were observable differences in development between a group with a "task" oriented leader and a group with a "social-emotional" leader. The data from the scored transcripts were subjected to analyses of variance and various tests of trend in an attempt to create a "map" of the phase movements of the two groups. Each group was described in terms of the number of phases observed, the duration of the phases, and the theme of each phase as revealed by the topical content and patterns of significant M-L categories. The two groups were then compared using these same criteria.

Conclusions

The seemingly simple question, which of the two leadership approaches is the more effective, is surprisingly resistent to final resolution. This study was initiated with the supposition that changes in the member-leader relationships would be minimal if "task" and "social-emotional"

functions were systematically varied. That is, if the leaders provided only one of the two functions with the complete exclusion of the other, neither group would pass through all the phases described by Mann (1967). This hypothesis was based on the results of the studies reported in Chapters I and II which indicated that both of these functions are interrelated and are both necessary for group growth and learning. It was also supposed that some group members would emerge as leaders thereby providing the missing function. In other words, in the "task" group a leader would emerge to provide "social-emotional" facilitation for the group, and vice versa.

(1) Group Development

With regard to phase movement, the hypothesis that neither group would complete every phase was largely verified. The remarkable differences between the groups, however, was not anticipated. There were differences both in the number of phases entered and in the time spent in each phase. Group 1 (task) entered five phases, while group 2 (social-emotional) entered only four. Only the initial phase was of the same duration for both groups. The five phases of Group 1 were quite distinct from one another and approximated (but did not resolve the issues in) those described by Mann (1967). In contrast, the phases for Group 2 were barely distinguishable from one another, only touched on a few of the issues considered relevant for phase movement, and

TABLE 4

MANN'S (1967) FIVE PHASES OF GROUP DEVELOPMENT

Phases	I	II	III	IV	V
Phase Names	Initial Complaining	Premature Enactment	Confrontation Phase	Internalization	Separation and Termination

did not seem to pass beyond Phase II (Premature Enactment) concerns. The lack of movement in Group 2 was not unexpected, but the extent of the changes and movement in Group 1 were somewhat surprising. The emerging leader hypothesis could have provided a reasonable explanation for the development of Group 1 but in neither group was it apparent that a compensatory leader emerged. Group 1 was brimming with conflict and frustration, while Group 2 appeared to be more complacent and content. Group 1 was both more productive and cohesive than Group 2.

The question now becomes why did the groups differ so dramatically and how does this relate to leadership style? The remainder of this chapter will include the implications of these experimental findings in an attempt to answer this question.

Implications

Before proceeding with the implications of this study, it must be pointed out that Mann's M-L observational system is rather restrictive in the sense that it focuses on only one aspect of group development - the member-leader relationships. Furthermore, it assumes that almost all verbal communication in a group relates in some way to this relationship. It follows then, that any conclusions and implications resulting from this study can only be valid when considered within these restrictions. In order to broaden the scope of the implications of the study, the explanations of the results

will be taken beyond those provided by the Mann model to include some of the theories and models presented in Chapters I and II.

(1) Group Development

A most reasonable and practical explanation for the differences in the development of the two groups is provided by F.E. Fiedler's (1965) "Contingency Model". The main premise of this model is that different situations require different kinds of leadership. It was developed because of what Fiedler felt was a need for a classified system which would identify the type of leader required for a particular group and task. The system is based on three major factors: (1) the leader-member relationship, (2) the nature of the task, and (3) the power of the leader's position.

(2) Leader-Member Relationship

Fiedler points out that the personal acceptance of the leader, or a positive leader-member relationship is the most important single factor determining meaningful interaction between the leader and his group. Obviously, it is easier to lead a group in which one is liked or accepted than to be the leader of a group in which one is disliked or rejected. To measure this factor Fiedler used a 20 item questionnaire consisting of descriptive terms referring to such things as "friendly" versus "unfriendly", "cooperative" versus "uncooperative" to get a measure of what he called "Least Pre-

ferred Co-worker" (LPC). A leader with a high LPC rating is one who is described in favorable terms and tends to be permissive, non-directing, and considerate. The main concern is with having good interpersonal relationships. A leader with a low LPC rating is one who is described in unfavorable, rejecting terms and tends to be directive, managing, and task controlling. The main concern is with achieving success on assigned tasks, even at the risk of having poor interpersonal relationships. Fielder's descriptions of low LPC leadership and high LPC leadership correspond to the leadership behaviors in this study described as "task" oriented (Leader 1) and "social-emotional" oriented (Leader 2). This conclusion is based on the results of the PAT Schedule of Member-Leader Relationships plus the personal evaluations of the leader made by the students after each session.

Fiedler's studies of leader LPC ratings and group performance have yielded high correlations between these two variables. However, sometimes it was the low LPC (task) leader that had the best performing group, while high LPC (social-emotional) leaders had groups which yielded the best results in other cases. It is the other two factors (task and leader power) that now come into play.

(3) Nature of the Task

What characteristics of the task determine the best type of leadership? Fiedler believes that it is the task structure, or the degree to which the task is defined. Task

structure can be measured by rating the task on four aspects: (1) decision verification, or the degree to which the correctness of the solution can be demonstrated, (2) goal clarity, or the degree to which the desired outcome is clearly stated, (3) goal path multiplicity, or the number of possible methods for performing the task, and (4) the solution specificity, or the degree to which there is more than one correct solution. In the case of this study, the task that the groups had to perform was a group term project which involved devising an observational system for studying the group dynamics of one's own group plus the group being observed. It is clear that the task could be carried out in any number of ways and would be considered relatively unstructured with regard to all four of the above aspects of task structure. The implications of this type of task will be discussed later in conjunction with the other two factors.

(4) Power Position of the Leader

Power position of the leader is considered the least important aspect of Fiedler's three factors for classification of the group situation and is basically the power of the leader to promote or demote, and his special rank or title. In this study the task leader (Leader 1) was the course instructor, male, and older than Leader 2, who was female, younger and the teaching assistant. The students perceived Leader 1 as more powerful on the PAT questionnaire and was seen as ultimately in control of the course grades.

Fiedler claims that the situation is more favorable for the leader when he occupies a strong power position.

(5) Implications for Leadership Style

The experimental setting for this study has now been defined in terms of Fiedler's three factors: leader-member relationships, task structure, and leader's power position. The type of leadership approach which will be most effective is now dependent or "contingent" upon the favorableness of the combination of these factors. Fiedler claims that the most favorable situation for group and personal growth is: (1) when the leader is accepted and liked, (2) when the task is structured, and (3) when the leader's power position is strong. The most unfavorable situation is one in which: (1) the leader-member relationship is poor, (2) the task is unstructured, and (3) the leader's power position is weak. Obviously these extreme situations do not correspond with the group situations in this study, nor do they approximate most groups situations. Rather, they tend to present varying degrees of each factor. Because the nature of the task and the leader power position are usually fixed variables, one must consider which situations favor the low LPC (task) leader and which favor the high LPC (social-emotional) leader. According to Fiedler, the task leader is most effective when the situation is either highly favorable or unfavorable, while the social-emotional leader is more effective when the situation is moderately favorable or unfavorable. When

the situation is very favorable the leader can be managing and controlling without arousing negative responses and there is no reason to reject the directive behavior of the leader. On the other hand, when the situation is highly unfavorable, things are going badly, and the group is in danger of falling apart, then directive, task-oriented leadership is required. If the situation is only moderately favorable the group needs to be treated with consideration and the social-emotional leader is more effective.

(a) Group 1

For Group 1 the situation was unfavorable for member-leader relations, unfavorable for the task and favorable for the leader's power position - generally an unfavorable group situation. Thus, Leader 1's approach was what Fiedler would consider appropriate for the group situation and probably accounts for it's rather high productivity (task assignment) and movement through the developmental phases. What was lacking, however, was the leader's failure to change with the changing needs of the group. This lack of flexibility likely accounts for the group's inability to really resolve the basic issues. Fiedler reports that as the group situation changes, which it invariably does, the leader's behavior must change also. For example, as the task becomes more structured, the leader can devote more time to facilitating interpersonal relationships. In the present study, leadership style was a fixed, independent variable that had to

remain as consistent as possible throughout the group life. Thus, when the group expressed a need for social-emotional facilitation, the leader was unable to respond to this and the group was forced to leave some of the important emotional issues unresolved.

(b) Group 2

For Group 2 the member-leader relationship was favorable, the task structure was unfavorable, and the power position of the leader was unfavorable - generally an unfavorable situation. Fiedler reports that this type of situation is best dealt with by a task-oriented leader, and a social-emotional leader can only be effective here if he is prepared to supply task facilitation early in the group life. That is, permissiveness and personal exploration can be beneficial at first, only if it is followed by behavior changes when the situation changes and task becomes important. As in the case of Group 1, Leader 2 was committed to a consistent social-emotional role and could not give the task facilitation when the group required it. This seems to provide an appropriate explanation for the inability of Group 2 to move past Phase II concerns.

(6) Conflict, Cohesion, and Change

C.G. Kemp (1964) suggests that group conflict can arise because: (1) members are interdependent, (2) members care, and (3) there are individual and sub-group differences in

the group. Conflict emerges when the group faces decisions that are central to "ongoingness". Some groups evade conflict, sometimes by resorting to superficial pleasantries in the actual presence of hidden feelings which then drain themselves through "superficial innuendoes" (p. 262). Resolution of conflict, however, in an open honest manner usually results in change and cohesion.

(a) Group 1

Group 1 was characterized by almost constant conflict and frustration. There appeared to be two main sources of conflict: (1) between the two sub-groups, and (2) between the leader and the counterdependent sub-group. If the old adage that change does not result without conflict is true, then Group 1 should have progressed with far more proficiency than it did. Although it has been noted that this group entered all five stages described by Mann, they did not resolve many of the basic conflict issues characteristic of each phase. Perhaps it was, as Kemp suggests, the creative handling of conflict that was wanting. Group 1 allowed its conflict to be quite open and honest which resulted in some forms of change and resolution (especially for some members with regard to the leader-member conflicts). However, the ongoing conflict between the sub-groups was not resolved. The result was a certain kind of cohesion, but this cohesion was not exhibited beyond the confines of the separate sub-groups.

(b) Group 2

In Group 2, any conflict was largely avoided or submerged. The result was that limited change occurred and there was little apparent group cohesion, either within the sub-groups, or for the group as a whole. As was mentioned in Chapter IV, the desire to maintain a positive emotional climate by avoiding or denying all sources of conflict seemed only to impede the growth and cohesion of the group.

(7) Productivity

The quality of the group term projects was somewhat better for Group 1 than for Group 2. This finding is consistent with other research on group productivity and leadership style (Morse and Reimer, 1956; Lewin, Lippitt, and White, 1939; Preston and Heintz, 1949). Results from these investigations indicate that groups with directive, non-participatory, task-oriented leaders usually have higher or equal productivity when compared to groups where the leadership is non-directive, participatory, and affect-oriented. A plausible explanation for this phenomenon is suggested by Shaw (1971). He claims that when goal achievement or productivity is an important issue for a group, it is easier and more expedient to be an autocratic, task-oriented leader than to be a democratic, social-emotional leader. This is because the time spent on interpersonal relations and emotional concerns is more difficult and time consuming and limits the time and energy devoted to task.

(8) Further Research

From the results of this study it can be seen that there is no single pattern of leadership behaviors that is necessarily more effective than another. Rather, it is the appropriate variation of behaviors according to the situation that is relevant.

Fiedler's Contingency Model provides a promising start to the integration of leadership styles and situational factors as determinants of group effectiveness. There is, however, a need for further studies that combine the sophistication and clinical orientation of Mann's M-L observational system with a method for defining other influential group factors. It may then be possible to use the cues provided by these other group factors to help determine the most appropriate leadership approach. This would be particularly helpful in the classroom where it is not uncommon for a teacher to have to function in a variety of group situations during each teaching day.

With regard to further research using Mann's M-L observational system as the method for measuring group development under various leadership styles, the following suggestions may help demarcate the findings of the present study:

(1) eliminate the groups' observation of one another to avoid vicarious leadership influences,

(2) limit the size of the groups to a more manageable number, such as six or seven members,

(3) increase the number of sessions to give the groups more time to develop.

(4) eliminate the imposed division of the groups into smaller work groups,

(5) vary the type of tasks involved according to degree of structure,

(6) use leaders of the same sex and degree of perceived power,

(7) include a group with a "flexible" leader where both task and social-emotional facilitation are provided as the "control" group.

BIBLIOGRAPHY

Anderson, H. H. The measurement of domination and of socially integrative behavior in teachers' contacts with children. Child Development, 1939, 10, 73-89.

Anderson, R. M. A comparison of Bales' and Flanders' systems of interaction analysis as research tools in small group instruction. Unpublished Doctoral Dissertation, University of Alberta, 1972.

Bales, R. F. Personality and interpersonal behavior. New York: Holt, Rinehart and Winston, 1970.

Bales, R. F. Interaction process analysis: A method for the study of small groups. Cambridge, Mass.: Addison-Wesley, 1950.

Bales, R. F. and Slater, P. E. Role differentiation in small decision-making groups. In T. Parsons and R.F. Bales (Eds.), Family, Socialization and Interaction Process. New York: Freepress, 1955, 259-306.

Bales, R. F. and Strodtbeck, F. L. Phases in group problem-solving. Journal of Abnormal and Social Psychology, 1951, 46 (4), 485-495.

Bavelas, A. Leadership: Man and function. Administrative Science Quarterly, 1960, 5, 491-498.

Bedecki, R. Patterns of structure and process in learning groups. Unpublished Masters Thesis, University of Alberta, 1972.

Bennis, W. G., Schein, E. H., Berlew, D. E. and Steele, F. I. Interpersonal dynamics: Essays and readings on human interaction. Homewood, Illinois: The Dorsey Press, 1964.

Bennis, W. G. and Shepard, H. A. A theory of group development. Human Relations, 1956, 9, 415-437.

Bion, W. R. Experiences in groups. New York: Basic Books, Inc., 1961.

Bion, W. R. Group dynamics: A review. International Journal of Psychoanalysis, 1952, 33, 235-247.

Bradford, L. P. Group development: Selected readings - One. Washington, D.C.: National Training Laboratories, 1961.

Bradford, L. P., Gibb, J. R. and Benne, K. B. (Eds.). T-group theory and laboratory method: Innovation in re-education. New York: John Wiley & Sons, 1964.

Cartwright, D. and Zander, A. Group dynamics: Research and theory. Evanston, Illinois: Row, Peterson and Company, 1962.

Cattell, R. B. and Stice, G. F. Four formulae for selecting leaders on the basis of personality. Human Relations, 1954, 7, 493-507.

Clifford, C. and Cohn, T. S. The relationship between leadership and personality attributes perceived by followers. Journal of Social Psychology, 1964, 64, 57-64.

Cooper, G. L. The influence of the trainer on participant change in T-groups. Human Relations, 1969, 22, 516-530.

Dunphy, D. C. Phases, roles, and myths in self-analytic groups. Journal of Applied Behavioral Sciences, 1968, 4, 195-223.

Egan, G. Encounter: Group processes for interpersonal growth. Belmont: Wadsworth Publishing Co., 1970, 123-189.

Etzioni, A. Dual leadership in complex organizations. American Sociological Review, 1965, 30, 688-698.

Fiedler, F. E. A theory of leadership effectiveness. New York: McGraw-Hill, 1967.

Fiedler, F. E. A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology. New York: Academic, 1964, 1, 149-190.

Fiedler, F. E. Leadership - A new model. In C.A. Gibb (Ed.), Leadership: Selected Readings. Baltimore: Penguin Books, 1969, 230-241.

Flanders, N. A. Teacher influence, pupil attitudes, and achievement. Minneapolis: University of Minnesota, (U.S. Office of Education Cooperative Research Project No. 397), 1960.

Freud, S. Group psychology and the analysis of the ego. London: Hogarth Press, 1921.

Gibb, C. A. The principles and traits of leadership. In C.A. Gibb (Ed.), Leadership: Selected Readings. Baltimore: Penguin Books, 1969.

Gibb, J. R. Climate for trust formation. In L.P. Bradford, J.R. Gibb and K.D. Benne (Eds.), T-Group Theory and Laboratory Method. New York: John Wiley & Sons, 1964, 279-309.

Gibb, J. R. The effects of human relations training. In A.E. Bergin and S.L. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change: An Empirical Analysis. New York: John Wiley & Sons, 1971.

Glick, O. The educational process in the classroom. The School Review, 1968, Sept., 339-351.

Gorman, A. H. Teachers and learners: The interactive process of education. Boston: Allyn and Bacon, 1969.

Hare, A. P. Small group discussions with participatory and supervisory leadership. The Journal of Abnormal and Social Psychology, 1953, 48 (2), 273-275.

Hare, A. P. Handbook of small group research. New York: John Wiley & Sons, 1962.

Heinicke, C. and Bales, R. F. Developmental trends in the structure of small groups. Sociometry, 1953, 239-253.

Hollander, E. P. Emergent leadership and social influence. In C.A. Gibb (Ed.), Leadership: Selected Readings. Baltimore: Penguin Books, 1969.

Kaplan, S. R. and Roman M. Phases of development in an adult therapy group. International Journal of Group Psychotherapy, 1963, 13, 10-26.

Kemp, G. Perspectives on the group process. Boston: Houghton Mifflin Co., 1970, 205-209.

Lewin, K., Lippitt, R. and White, R. K. Patterns of aggressive behavior in experimentally created "social climates". Journal of Social Psychology, 1939, 10, 271-299.

Mann, R. D. A review of the relationships between personality and performance in small groups. Psychological Bulletin, 1959, 56, 241-270.

Mann, R. D. The development of the member-leader relationship in self-analytic groups. Human Relations, 1966, 19, 85-115.

Mann, R. D. The college classroom: Conflict, change and learning. New York: John Wiley & Sons, 1970.

Mann, R. D. Interpersonal styles and group development: An analysis of the member-leader relationship. New York: John Wiley & Sons, 1967.

McLeish, J., Matheson, W. and Park, J. The psychology of the learning group. London: Hutchinson University Library, 1973.

Miles, M. B. Learning to work in groups. New York: Teachers College Press, 1967.

Mills, T. M. Group transformation: An analysis of a learning group. Englewood Cliffs, N.J.: Prentice-Hall, 1964.

Morse, N. C. and Reimer, E. The experimental change of a major organizational variable. Journal of Abnormal and Social Psychology, 1956, 52, 120-129.

Newcomb, T. M., Turner, R. H. and Converse, P. E. Leadership roles in goal achievement. In G.A. Gibb (Ed.), Leadership: Selected Readings. Baltimore: Penguin Books, 1969.

Parsons, T. and Bales, R. F. Family socialization, and interaction process. London: Routledge & Kegan Paul, 1956.

Philip, H. and Dunphy, D. Developmental trends in small groups. Sociometry, 1959, 22, 162-174.

Preston, M. G. and Heintz, R. K. Effects of participatory vs. supervisory leadership on group judgment. Journal of Abnormal and Social Psychology, 1949, 44, 345-355.

Redl, F. Group emotion and leadership. Psychiatry, 1942, 5, 573-596.

Rogers, C. R. Freedom to learn. Columbus, Ohio: Charles E. Merrill Publishing Co., 1969.

Schmuck, R. A. and Schmuck, P. A. Group processes in the classroom. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1971.

Schutz, W. C. The interpersonal underworld, Palo Alto, California: Science & Behavior Books, 1966.

Schutz, W. C. FIRO: A three-dimensional theory of interpersonal behavior. New York: Holt, Rinehart & Winston, 1958.

Shaw, M. E. A comparison of two types of leadership in various communication nets. Journal of Abnormal and Social Psychology, 1955, 50, 127-134.

Shaw, M. E. Group dynamics: The psychology of small group behavior. New York: McGraw-Hill, 1971.

Shepard, H. A. The T-group as training in observant participation. In J. McLeish et al. (Eds.), Group Structure and Group Process: A Book of Readings, The University of Alberta, 1972, 382-388.

Stogdill, R. M. Personal factors associated with leadership: A survey of the literature. Journal of Psychology, 1948, 25, 35-71.

Trow, W., Zander, A., Morse, W. and Jenkins, D. Psychology of group behavior: The class as a group. Journal of Educational Psychology, 1950, Oct., 322-338.

Tuckman, B. W. Developmental sequence in small groups. Psychological Bulletin, 1965, 63, 384-399.

Withall, J. The development of a climate index. Journal of Educational Research, 1951, 45, 93-99.

APPENDIX A

THE CONTENT CATEGORIES OF MANN'S MEMBER-LEADER SCORING SYSTEM (ADAPTED FROM MANN'S 1967, 1970 ACCOUNTS)

#1 - Moving Against

Three major characteristics:

(1) the hostility if aroused by and/or directed to the person of leader, as opposed to his "in-role" behavior;

(2) the expression of feeling has an active, self-initiated quality, rather than being mainly passive or reactive; and

(3) the hostility expressed is couched in personal terms of anger, criticism, and mistrust rather than in moralistic terms of someone invoking a higher value as a weapon against the leader.

Member mocks or belittles the leader... to deflate him.

Acts of personal criticism, aimed more at the person behind the role rather than the role itself.

Leader as weak, incompetent, voyeuristic, rigid, devious, odious; desire to hurt the leader, offend, retaliate.

Expressions which take the form of mistrust, suspicion, scorn, and sarcasm are scored as "Moving Against".

Examples of acts scored as "Moving Against":

(1) "You see, you're trying to get him (the leader) to reveal any kind of an emotion and I don't think - he's not going to do that."

(2) "Why do we have to write our name on this? Just so you can keep tabs on us?"

#2 - Resisting

Two major characteristics:

(1) the hostility is directed at the role or the performance of the leader; and

(2) the hostility is largely responsive (reactive), occurring on the occasion of explicit pressures from the leader, or, in response to the felt pressures generated by the entire learning situation.

Resisting usually follows some intervention of the leader.

Rejection of an interpretation, various forms of contradiction, negative responses to the structure and pacing of the course provided by the leader, criticism of "aimless talk", disagreement, impatience with continued discussion of a topic, are indicators of "Resisting".

Examples of acts scored as "Resisting":

(1) "This course? Well, I'm not going to be able to apply it to the classroom too well."

(2) "What's the point of coming during reading week?"

#3 - Withdrawing

(1) Withdrawing is a form of hostility aimed at loosening the bond between the member and the leader. Acts which express the desire to decrease the intensity of the Member-Leader relationship, or to prevent it from becoming intense are scored as Withdrawing. Efforts to ignore the leader; statements about leaving the group; boredom, disinterest, or acts which express the desire to keep the leader out of his "inner" world and to weaken the bond between them are scored as Withdrawing.

(2) To isolate the group experience from one's "real self"; verbalized feelings of "reserve" and "shyness" which make a member hold back for fear of being hurt or rejected, are forms of Withdrawing.

(3) Acts which are manifestly attempts at humor - the introjected pun or the wild and escapist free-associations to a threatening discussion - may be forms of Withdrawing. When asked a question, a "response" of declining to enter into interaction is scored as withdrawing: as is the "response" to the leader's questions by silence (depends on context).

Examples of acts scored as "Withdrawing":

(1) "Did anyone see the movie Adronimous Strain?"

(2) "I'd rather not answer that right now."

#4 - Guilt Inducing

Some hostility depends upon the invocation of a "third force": the set of values, morals, and unwritten rules of etiquette which the member asserts should be operative and

binding upon the leader's behavior. The desired outcome of the member's act seems not to hurt, block, or avoid the leader, but to make him feel guilty in the light of these higher values. The three main verbs are: accuse, blame, and complain.

In "Guilt Inducing" the members berate the leader for being inconsistent, for playing favorites, for being too impartial, and for being retentive, ineffectual, or hypocritical. Members blame the leader for making the group self-conscious, for causing the collapse of efforts to work, and for not preventing the end of the group.

Three premises that generate Guilt Inducing acts:

(1) the leader, regardless of his formal role, is bound by the ethics of ordinary human interaction: be humane, strong, sensitive, honest, fair, kind, thoughtful, considerate, and generous;

(2) the leader is bound to fulfill the members' expectations regarding leaders in general: be strong, be univeralistic, be helpful;

(3) the leader should either be the paragon of all virtues or else manage to conceal any flaws from the believing multitudes.

Guilt Inducing unmasks the leader, exposing his selfishness. Because these are "legitimate" demands, the member usually doesn't apprehend his hostility toward the leader. One of the major cues is the use of evaluative terms - should, must, have a right to. It is a quality of <u>legitimacy</u>, of invoking the sense that a thing <u>must</u> be done.

Examples of acts scored as "Guilt Inducing":

(1) "Well, I mean, we could have done this chart if we understood what we were suppose to do with it."

(2) "They (the other group) do a lot of things that aren't for us."

<u>#5 - Making Reparation</u>

Making Reparation is the process of countering or undoing the hostile impulses one feels toward another person

Making Reparation can only be comprehended by consider-

ing the hostile context in which it occurs.

Making Reparation takes the form of:

(1) backing off from, or apologizing for, some earlier hostility toward the leader; or as prior response to some form of hostility which is about to occur;

(2) denying or in some way neutralizing any current hostility;

(3) disassociating oneself from the hostility of others;

(4) expanding the target of some hostile act toward the leader to include oneself, sometimes to the extent that the self replaces the leader as the legitimate target.

Examples of acts scored as "Making Reparation":

(1) "To me it seemed like such an awfully harsh plan. I wasn't willing to go ahead with it."

(2) "I'm not sure the hostilities are unanimous."

#6 - Identifying

In general, the member takes on some aspects or quality of the leader - may include mannerisms of speech, peculiarities of style, or personal values, general attitudes and philosophy.

Playing the leader's role in relation to another group member, copying the leader, incorporating the leader's ideas as one's own, expressing a wish to be like the leader are forms of Identifying.

Three aspects of the leader with which the members can identify:

(1) his tendency to make interpretive comments about the group process;

(2) his values, his general outlook on life, or his particular philosophy about how to teach; and

(3) his mannerisms, or other rather superficial aspects of his behavior.

When the feelings contained in the interpretation are

not those of the member, but are, rather, feelings he has chosen to interpret, as might the leader, we score the act as Identifying.

When the feelings are those of the member, if the member adopts the "observer's stance", the act is scored as Identifying.

When in doubt, the scorer looks first for the "expressive" aspects and only later for the "leader-like stance" the member may be taking.

Examples of act scored as "Identifying":

(1) "Are you (another member) saying, then that in the classroom it is different?"

(2) "I think these results could almost have been predicted from the way the group formed. What do you think?"

#7 - Accepting

Both Accepting and Resisting are primarily reactive to the role performance of the leader.

Major forms of Accepting are: (Accepting vs. Moving Toward):

(1) agreeing with the leader;

(2) approving of his behavior or the structure of the course; and

(3) testifying to the validity of appropriateness or the leader's interpretation.

Accepting vs. Making Reparation: depends on how ambivalent the member is. Making Reparation involves an effort by the member to counter or undo his own hostility. Before scoring an act as Accepting, the scorer must satisfy himself that the act is not primarily an attempt to stifle the negative side of the member's ambivalence.

Accepting vs. Identifying: the crucial issue here is the temporal or causal connectedness of the leader's act and the member's act. Accepting says: "See, I support you", whereas Identifying says: "See, I am similar to you".

Examples of acts scored as "Accepting":

(1) "That's an interesting point."

(2) "I would say that description was a very accurate way of describing the way we perceive what's happened."

#8 - Moving Toward

Personal affection for the leader in the form of liking, trust, comfort, admiration; perception of the leader which is associated with a warm, positive response; acts which indicate that the member is interested in decreasing the distance between himself and the leader; that he would like to know the leader or become friendly with him, are scored as Moving Toward.

Many acts scored in this category are elliptical and guarded.

Moving Toward suggests some desire to establish, strengthen, or exhibit positive and personal bonds with the person and, in this way, contrasts with the more role-oriented, impersonal affection expressed in "Accepting".

Examples of acts scored as "Moving Toward":

(1) "That's why I think we should look at her (the leader's) point too."

(2) "No wonder you're feeling the pressure."

#9 - Showing Dependency (Member):

(The "authority relations area" assesses the member's feelings toward the power of the leader.)

Characteristic feelings:

(1) the member perceives the leader to be more powerful and then responds in a submissive and deferential manner; or

(2) the member wishes the leader were more powerful and attempts to maneuver him into that position by appropriate action.

In either case, the leader's power may involve:

(1) the power to provide members with the crucial

gratifications, sometimes in the form of rewards and punishments;

(2) the power which derives from control over the means, such as knowledge and experience, which are relevant to the attainment of group goals; and

(3) the power to determine the destiny of the group, for good or ill.

More subtly, dependency involves those acts which presume that the group is weak whereas the leader is strong, or that the group is passive and the leader is in full command of the situation.

Often these acts take the form of angry or impatient clamoring for the leader to be more helpful and supportive or, perhaps, to magically infuse the group with "life" so that it can "go" - get on with the task.

Examples of acts scored as "Showing Dependency":

(1) "How do you want us to use our student teaching experience?"

(2) "Should we express our opinions or desires as to a specific subject to talk about?"

Counterdominant (Leader):

This captures those moments when the leader moves against his real or perceived power by denying or disowning it. Very often this takes the form of a role-reversal, in which the leader "plays dumb" by asking questions and deferring to the students' judgment. This category reflects the leader's desire to push aside the barriers he may feel separate him from his students, barriers built into the power differential which, in fact, is an integral part of the traditional teaching situation.

Examples of acts scored as "Counterdominant":

(1) "I'm wondering what you'd like to do today?"

(2) "That's up to you. I have no preconceived notions about whether you should or shouldn't get together with the other group."

#10 - Showing Independence

Acts which express the member's feelings of autonomy and

freedom from the constricting influence of the leader's power. There are three basic ways in which this feeling is expressed:

(1) acts which emphasize the member's own responsibility for his fate;

(2) acts which attempt to clarify the member's goals and values or to enunciate the member's criteria for evaluating his own and other's behavior; and

(3) acts which convey a sense of colleagueship and equality between member and leader.

Examples of acts scored as "Showing Independence":

(1) "Up to now we've been doing it on a group basis - looking for similarities, reactions and that sort of thing."

(2) "The whole question, I think, is our activity, what goes on in, within, the group."

#11 - Showing Counterdependency (Member):

A person may attempt Counterdependency either by denying his inner needs or by various assaults upon external manifestations of power and control.

Acts of Counterdependency are of two forms; one aimed at the denial of and the other aimed at the destruction of the existing authority structure.

Any effort to decrease the leader's power for reasons of enhancing the member's own sense of power belongs in this category.

Counterdependency acts are distinguished from Showing Independence in that they typically have a more conflicted and defensive quality about them.

Counterdependency acts express some need to break away from a sense of Dependency; rather than a clear expression of autonomy or freedom.

Examples of acts scored as "Showing Counterdependence":

(1) "No, I mean voluntary commitment to the group, not forced commitment."

(2) "There's a lot more I could do about it (hostility) than is being done here."

Dominance (Leader):

It is in this category that a tremendous number of teacher acts fall. This makes sense, since the category captures the times when the leader is playing out the traditional role prescriptions - lecturing, calling on people, giving assignments or tests, making decisions for the group, and the like, but without necessarily invoking any moral standards or value stances in order to justify this. Showing Dominance is seen clearly when the teacher simply takes over, for instance, by interrupting a discussion to begin the lecture.

Examples of acts scored as "Dominance":

(1) "First of all, are there any general questions or anything arising out of your Friday meetings?"

(2) "Well, I think what you could probably do is use it in a larger context for your project."

#12 - Expressing Anxiety

Anxiety is defined as an affective state which accompanies a person's recognition that he is approaching, or is already in, a dangerous situation. The common element is the sense of threat to one's own safety or self-regard.

Observable indications that a person is experiencing anxiety are of three major forms:

(1) semi-voluntary and non-verbal indications of inner tension;

(2) public assessment of one's own inner state; and

(3) the person's assessments of the environment, or of particular people, (especially the leader), which seem congruent with the inner experience of anxiety.

The ingredients of the complete act are a vulnerable, threatened self in relation to a judging and dangerous object, and many of the acts convey both sides of this relationship.

Examples of acts scored as "Expressing Anxiety":

(1) "I - uh - uh - would - would - disagree with you - uh - a little."

(2) "What did you say about me?" (Laughs).

#13 - Denying Anxiety

Statements that express a feeling of goodness, comfort, or relaxation can have one of two meanings. They can be expressions of self esteem or they can be defensive denials of feeling afraid, uncomfortable, or vulnerable. The critical attribute for scoring denial is the focus on negation.

(Problem: to separate "denials" from the relatively genuine expressions of "self-esteem".)

Scoring Denying Anxiety depends largely on the context of the act.

Acts of Denying Anxiety are cast primarily in negative terms.

Similarly, when the act follows closely an expression of anxiety, and the person seems primarily concerned with negating the import of that prior act, it is scored Denying Anxiety.

The element of negation is crucial, as is the context of others' expressed anxiety.

Qualities of protesting against inner distress and of belittling what is threatened are indicators of "Denying Anxiety".

Examples of acts scored as "Denying Anxiety":

(1) "I don't know why you'd worry about it."

(2) "We're going to get some great data from this last tape."

#14 - Expressing Self-Esteem

Self-esteem acts are expressions of self-satisfaction and contentment which seem motivated more by the need to express oneself than by the need to counter and deny feelings of distress.

The intention is to record the moments when the member "feels good" in relation to the leader.

The major ways in which a member expresses his self-esteem are:

(1) through his sense of being relaxed or secure; and

(2) through feeling capable of performing some important task and capable of being what he wishes to be (honest, warm, etc.).

The essential defining characteristic of these acts is that they convey a feeling of self-esteem which is credible, which leaves it to the scorer to separate the expressive from the defensive, the denial from the valid self-report.

Examples of acts scored as "Expressing Self-Esteem":

(1) "I don't feel up tight, I feel relaxed."

(2) "I wouldn't have any trouble handling that type of problem in the classroom."

#15 - Expressing Depression

Bibring identifies the feeling of helplessness as the essential ingredient of all depression. It has two main components:

(1) when the person is helpless to effect desired changes in the external world; and

(2) when he is helpless to control inner forces which he wishes to restrain.

Typically, Depression is expressed in terms of incompetence. Powerlessness and guilt underlie most of the acts scored as Expressing Depression.

Powerlessness is expressed in terms of a sense of inadequacy. The members portray themselves as weak, ineffectual, and insignificant and the leader as competent and powerful.

Guilt is expressed in the recognition of how unsteady the inner controls can be at times, how helpless the ego is in the face of massive arousal of unacceptable impulses of any variety.

Examples of acts scored as "Expressing Depression":

(1) "My comment is probably not even on the topic."

(2) "Well, I'm probably the only one here who doesn't know, really, what an encounter group or sensitivity group is."

#16 - Denying Depression

Much of what was said regarding Denying Anxiety would apply to Denying Depression, except that what is being denied shifts from feeling threatened by a dangerous external force to feeling powerless and guilty.

The content of the denials, when the issue is powerlessness, may involve strident assertions of potency and efforts to disparage any power differential between the members and the leader. When the issue is one of loss, the denial may involve plans to minimize the effect of separation, or it may simply involve unwillingness to share in the feelings of sadness. Denial of guilt feelings often proceeds down the familiar blame-avoidance path of defensiveness, deflection of blame, and self-justification.

Scoring Denying Depression involves the antecedents and context of the act. This category focuses upon the attempt to restore self-esteem and decrease depression through the mechanisms of denial, suppression, and reaction formation.

The manic defences against Depression often involve more active modes such as euphoric denial of sadness, separation, and guilt.

Examples of acts scored as "Denying Depression":

(1) "They (other members) had a completely different image of you (leader) and it made conversation between us impossible."

(2) "It was really comical, we just sat and beat around the bush."

APPENDIX B

TABLES AND FIGURES USED IN THE STUDY OF GROUP DEVELOPMENT

TABLE B1

SUMMARY OF ONE-WAY ANALYSIS OF VARIANCE

(VAR. #1 MOVING AGAINST) GROUP 1 (TASK)

Source of Variation	SS	DF		MS	F	P
Between Subjects	76062.08	12	n-1			
Within Subjects	268387.80	117	n(k-1)	2293.93		
Treatments	57782.65	9	k-1	6420.29		
Residual (Error)	210605.15	108	(n-1)(k-1)	1950.05	3.29	0.002
Total	344449.88	129		2670.15		

TABLE B2

SUMMARY OF ONE-WAY ANALYSIS OF TRENDS

(VAR. #1 MOVING AGAINST) GROUP 1 (TASK)

Coefficients in Tests for Trend

Linear	- 9	- 7	- 5	- 3	- 1	1	3	5	7	9
Quadratic	6	2	- 1	- 3	- 4	- 4	- 3	- 1	2	6
Cubic	-42	14	35	31	12	-12	-31	-35	-14	42
Quartic	18	-22	-17	3	18	18	3	-17	-22	18

Source of Variation	SS	DF		MS	F	P
Within Subjects	268387.80	117	n(k-1)	2293.91		
Within Subjects Linear	14950.29	13	n			
Treatments Linear	1272.01	1	1	1272.01	1.115	0.313
Error Linear	13678.29	12	n-1	1139.86		
Within Subjects Quadtratic	10750.92	13	n			
Treatments Quadratic	3688.96	1	1	3688.96	6.268	0.026
Error Quadratic	7061.96	12	n-1	588.49		
Within Subjects Cubic	15983.14	13	n			
Treatments Cubic	2062.65	1	1	2062.65	1.778	0.205
Error Cubic	13920.48	12	n-1	1160.04		
Within Subjects Quartic	54522.71	13	n			
Treatments Quartic	18756.93	1	1	18756.93	6.293	0.026
Error Quartic	35765.78	12	n-1	2980.482		

TABLE B3

SUMMARY OF TWO-WAY ANALYSIS OF VARIANCE

(VAR. #1 MOVING AGAINST) GROUPS 1 AND 2

Source of Variation	SS	DF		MS	F	P
Between Subjects	103534.69	25	np-1	4141.39		
A main effects	21367.11	1	p-1	21367.11	6.241	0.019
Subj. within groups	82167.59	24	p(n-1)	3423.65		
Within Subjects	284976.30	234	np(q-1)	1217.85		
B main effects	33646.80	9	(q-1)	3738.53	3.573	0.001
AB interaction	25297.23	6	(p-1)(q-1)	2810.80	2.686	0.006
B x subj. w. groups	226032.26	216	p(n-1)(q-1)	1046.45		

TABLE B4

SUMMARY OF TWO-WAY ANALYSIS OF VARIANCE

(VAR. #1 MOVING AGAINST) GROUPS 1 AND 2

Source of Variation	SS	DF		MS	F	P
Within Subjects	284976.30	234	np(q-1)	1217.85	1.192	0.286
Within Subjects Linear	15165.40	26	np			
B linear	689.92	1	1	689.92	1.192	0.286
AB linear	584.28	1	p-1	584.28	1.009	0.327
B x sub. w. gps. linear	13891.21	24	p(n-1)	578.40		
Within Subjects Quadratic	11866.76	26	np			
B quadratic	2611.89	1	1	2611.89	7.792	0.009
AB quadratic	1210.21	1	p-1	1210.21	3.611	0.066
B x subj. w. gps. quad.	8044.65	24	p(n-1)	335.19		
Within Subjects Cubic	16678.32	26	np			
B cubic	1047.16	1	1	1047.16	1.719	0.199
AB cubic	1015.61	1	p-1	1015.61	1.668	0.206
B x subj. w. gps. cubic	14615.55	24	p(n-1)	608.98		
Within Subjects Quartic	55908.98	26	np			
B quartic	11109.50	1	1	11109.50	7.205	0.013
AB quartic	7793.94	1	p-1	7793.94	5.055	0.032
B x subj. w. gps. quart.	37005.55	24	p(n-1)	1541.89		

TABLE B5

MEANS AND F RATIOS FROM ONE-WAY ANALYSIS OF VARIANCE ON MANN'S SIXTEEN CATEGORIES WITH TEN REPEATED MEASURES ON GROUP 1 (TASK)

Factor B	Repeated Measures										F	P
Category	1	2	3	4	5	6	7	8	9	10		
# 1	0.00	57.85	29.38	2.77	7.00	21.15	35.69	51.84	0.00	0.00	3.29	.002
# 2	244.92	39.23	23.08	15.92	96.46	84.00	45.38	37.85	85.23	31.00	2.95	.004
# 3	38.62	30.08	45.23	1.38	33.54	57.92	49.38	3.77	36.08	86.38	0.71	.704
# 4	17.08	56.92	74.62	15.54	47.62	64.38	13.62	46.85	19.23	5.46	2.66	.008
# 5	0.00	14.69	8.54	0.00	3.69	1.31	6.85	19.92	0.00	20.85	1.56	.135
# 6	78.85	43.54	33.08	49.54	32.08	54.00	58.62	76.38	86.85	49.46	0.67	.731
# 7	9.62	63.23	85.54	20.38	25.31	21.85	34.69	39.08	20.54	31.15	1.89	.061
# 8	2.85	0.00	0.00	0.00	0.00	0.00	0.00	52.54	0.00	3.85	1.71	.095
# 9	69.15	22.38	91.54	68.77	100.46	29.15	14.38	20.69	83.23	20.15	1.87	.064
#10	169.08	54.08	276.00	227.85	141.62	88.92	146.00	91.77	222.54	61.23	1.83	.070
#11	76.54	41.31	16.46	1.38	44.46	62.38	58.46	34.15	44.77	16.46	1.61	.121
#12	109.15	148.15	289.31	130.62	193.62	98.00	129.85	198.38	79.38	90.69	2.82	.005
#13	11.38	40.46	26.92	1.38	25.31	9.92	16.46	2.54	12.54	16.31	1.28	.253
#14	0.00	0.00	0.00	1.38	4.77	3.62	4.62	6.38	0.00	4.08	0.58	.812
#15	18.54	3.46	0.00	1.38	12.85	12.31	0.00	10.08	1.77	4.15	0.84	.580
#16	0.00	0.00	0.00	0.00	0.00	6.15	1.38	0.00	0.00	19.77	2.36	.018

TABLE B6

MEANS AND F RATIOS FROM ONE-WAY ANALYSIS OF VARIANCE ON MANN'S SIXTEEN CATEGORIES WITH TEN REPEATED MEASURES ON GROUP 2 (SOCIAL-EMOTIONAL)

Factor B	Repeated Measures										F	P
Category	1	2	3	4	5	6	7	8	9	10		
# 1	0.00	3.31	3.46	2.62	5.69	0.00	0.00	9.31	0.00	0.00	0.90	.526
# 2	43.38	35.54	56.15	63.69	11.62	12.69	38.00	6.46	22.46	13.85	1.88	.063
# 3	21.46	9.38	62.69	0.00	10.54	0.00	34.69	28.92	20.38	7.15	3.13	.003
# 4	18.00	40.62	9.69	9.54	31.69	55.85	24.00	27.77	77.38	36.00	2.14	.032
# 5	30.38	52.69	0.00	9.08	0.00	17.85	7.46	12.08	28.46	7.69	1.00	.551
# 6	81.46	146.85	100.31	111.00	52.54	81.08	77.38	41.46	79.23	82.38	0.94	.502
# 7	67.46	42.69	45.31	70.62	12.85	131.92	78.00	35.31	25.85	0.00	1.51	.154
# 8	12.46	6.15	7.00	9.00	26.77	0.00	14.77	8.92	0.00	4.31	1.36	.213
# 9	9.31	12.46	32.69	16.23	39.00	52.62	22.69	27.38	56.46	68.31	1.45	.175
#10	135.15	198.15	222.15	172.46	254.62	259.85	281.62	128.31	194.62	325.15	1.43	.185
#11	12.85	13.54	74.54	29.92	13.62	16.31	30.85	16.23	15.38	27.92	2.86	.005
#12	313.08	149.46	125.38	168.31	265.46	213.38	54.23	166.23	160.23	245.15	2.18	.028
#13	23.46	39.85	29.69	23.00	18.31	1.69	14.08	9.38	7.84	3.62	0.98	.535
#14	0.00	0.00	0.00	1.15	2.77	0.00	0.00	0.00	0.00	1.77	1.25	.273
#15	0.00	11.15	0.00	5.46	6.85	2.77	7.46	10.46	3.85	7.69	0.57	.822
#16	0.00	7.00	0.00	0.00	16.77	0.00	7.15	0.00	0.00	15.00	1.99	.047

TABLE B7

MEANS AND F RATIOS FROM TWO-WAY ANALYSIS OF VARIANCE ON MANN'S SIXTEEN CATEGORIES WITH TEN REPEATED MEASURES ON GROUPS 1 AND 2

Factor B	Repeated Measures										F	P
Category	1	2	3	4	5	6	7	8	9	10		
# 1	0.00	30.58	16.42	2.69	6.35	10.58	17.85	30.58	0.00	0.00	3.58	.001
# 2	144.15	37.38	39.62	39.81	54.04	48.35	41.69	22.15	53.85	22.42	2.75	.005
# 3	30.04	19.73	53.96	0.69	22.04	28.96	42.04	16.35	28.23	46.77	0.99	.554
# 4	17.54	48.77	42.15	12.54	39.65	60.12	18.81	37.31	48.31	20.73	2.39	.013
# 5	15.19	33.69	4.26	4.54	1.85	9.58	7.15	16.00	14.23	14.27	1.07	.387
# 6	80.15	95.19	66.69	80.27	42.31	67.54	68.00	58.92	83.04	65.92	0.59	.807
# 7	38.54	52.96	65.42	45.50	19.08	76.88	56.35	37.19	23.19	15.58	1.34	.219
# 8	7.65	3.08	3.50	4.50	13.38	0.00	7.38	30.73	0.00	4.08	1.62	.110
# 9	39.23	17.42	62.12	42.50	69.73	40.88	18.54	24.04	69.85	44.23	1.72	.086
#10	152.12	126.12	249.08	200.15	198.12	174.38	213.81	115.04	208.58	193.19	1.17	.312
#11	44.69	27.42	45.50	15.65	29.04	39.35	44.65	25.19	30.08	22.19	0.97	.533
#12	211.12	148.81	207.35	149.46	229.54	155.69	92.04	182.31	119.81	167.92	1.80	.069
#13	17.42	40.15	28.31	12.19	21.81	5.81	15.27	5.96	10.19	9.96	1.80	.069
#14	0.00	0.00	0.00	1.27	3.77	1.81	2.31	3.19	0.00	2.92	0.78	.635
#15	9.27	7.31	0.00	3.42	9.84	7.54	3.73	10.27	2.81	5.92	0.61	.789
#16	0.00	3.50	0.00	0.00	8.38	3.08	4.27	0.00	0.00	17.38	3.18	.002

TABLE B8

SUMMARY OF ANALYSIS OF TRENDS F RATIOS ON MANN'S SIXTEEN CATEGORIES WITH TEN REPEATED MEASURES ON GROUP 1 (TASK)

Factor B	Overall	ANOVA	Linear Trend		Quadratic Trend		Cubic Trend		Quartic Trend	
Category	F	P	F	P	F	P	F	P	F	P
# 1	3.29	.001	1.12	.313	6.27	.026	1.78	.205	6.29	.026
# 2	2.95	.004	2.18	.163	1.64	.223	6.08	.028	7.48	.017
# 3	0.71	.744	0.35	.571	0.34	.577	0.19	.672	1.13	.309
# 4	2.66	.008	2.34	.149	6.68	.023	0.48	.510	2.08	.172
# 5	1.56	.135	1.12	.312	1.46	.250	0.65	.560	3.24	.094
# 6	0.67	.731	0.45	.522	1.44	.252	5.90	.030	0.22	.649
# 7	1.89	.061	0.78	.603	0.31	.594	2.54	.134	6.30	.026
# 8	1.71	.095	1.84	.198	0.06	.807	1.64	.223	1.27	.282
# 9	1.87	.064	1.51	.242	0.32	.585	1.45	.251	0.00	.950
#10	1.83	.070	1.96	.185	1.03	.332	0.44	.523	0.62	.546
#11	1.61	.121	0.42	.537	0.09	.767	4.95	.044	0.86	.626
#12	2.82	.005	2.39	.145	4.39	.056	3.35	.089	3.01	.105
#13	1.28	.253	3.77	.093	0.23	.642	1.76	.207	0.56	.524
#14	0.58	.812	2.59	.131	0.93	.645	0.35	.573	0.42	.535
#15	0.84	.580	1.57	.233	0.06	.808	1.40	.259	1.87	.194
#16	2.36	.018	3.28	.092	1.53	.239	2.38	.145	4.60	.051

TABLE B9

SUMMARY OF ANALYSIS OF TRENDS F RATIOS ON MANN'S SIXTEEN CATEGORIES WITH TEN REPEATED MEASURES ON GROUP 2 (SOCIAL-EMOTIONAL)

Factor B	Overall	ANOVA	Linear Trend		Quadratic Trend		Cubic Trend		Quartic Trend	
Category	F	P	F	P	F	P	F	P	F	P
# 1	0.90	.526	0.12	.730	1.626	.225	0.00	.963	1.42	.256
# 2	1.88	.063	17.98	.001	0.00	.977	0.66	.561	0.82	.613
# 3	3.13	.003	0.60	.540	0.00	.959	0.11	.741	11.78	.005
# 4	2.14	.032	5.77	.032	0.25	.632	0.90	.636	0.25	.630
# 5	1.00	.551	0.84	.620	2.00	.180	0.55	.523	0.61	.543
# 6	0.94	.502	2.56	.133	0.30	.597	3.04	.104	0.49	.501
# 7	1.51	.153	1.67	.218	1.39	.260	5.67	.033	1.21	.293
# 8	1.36	.213	1.79	.203	0.72	.581	0.06	.811	1.78	.205
# 9	1.45	.175	3.09	.101	0.05	.826	1.08	.321	0.73	.587
#10	1.43	.185	3.03	.104	0.10	.752	2.61	.129	2.96	.108
#11	2.86	.005	0.27	.618	0.30	.599	17.31	.002	1.76	.208
#12	2.18	.028	0.38	.555	1.79	.203	0.00	.962	8.88	.011
#13	0.98	.535	5.99	.029	0.04	.835	0.44	.524	1.43	.253
#14	1.25	.273	0.38	.555	0.15	.708	2.46	.140	2.23	.159
#15	0.57	.822	2.12	.168	0.03	.865	0.01	.933	0.52	.508
#16	1.99	.047	0.727	.585	0.09	.769	2.01	.180	1.50	.243

TABLE B10

SUMMARY OF ANALYSIS OF TRENDS F RATIOS ON MANN'S SIXTEEN CATEGORIES

WITH TEN REPEATED MEASURES ON GROUPS 1 AND 2

Factor B Category		Overall	ANOVA	Linear Trend		Quadratic Trend		Cubic Trend		Quartic Trend	
		B	AB	B	AB	B	AB	B	AB	B	AB
# 1	F	3.57	2.69	1.19	1.01	7.79	3.61	1.72	1.67	7.21	5.05
	P	.001	.006	.286	.327	.009	.066	.199	.207	.015	.032
# 2	F	2.75	2.88	4.59	0.59	1.51	1.54	3.91	6.71	5.06	8.29
	P	.005	.003	.040	.548	.229	.224	.057	.015	.032	.008
# 3	F	0.99	0.99	0.17	0.56	0.31	0.33	0.07	0.29	0.04	3.44
	P	.554	.549	.689	.531	.590	.575	.785	.603	.830	.073
# 4	F	2.39	2.43	0.04	7.07	2.15	4.72	0.02	1.33	1.58	0.20
	P	.013	.012	.837	.013	.153	.038	.877	.259	.219	.662
# 5	F	1.07	1.08	0.15	1.63	3.08	0.78	0.17	0.97	1.07	0.25
	P	.387	.379	.702	.212	.089	.609	.691	.664	.312	.624
# 6	F	0.589	1.09	0.58	2.71	1.19	0.02	0.00	8.12	0.71	0.15
	P	.807	.369	.541	.109	.287	.882	.953	.009	.588	.705
# 7	F	1.34	1.85	2.46	0.32	1.64	1.02	0.25	7.84	0.29	5.47
	P	.219	.060	.127	.583	.210	.323	.629	.009	.603	.026
# 8	F	1.62	1.64	0.51	3.16	0.74	0.40	1.53	1.02	0.18	2.55
	P	.109	.105	.510	.085	.598	.539	.226	.323	.679	.119

TABLE B10 (CONTINUED)

Factor B Category		Overall ANOVA B	Overall ANOVA AB	Linear Trend B	Linear Trend AB	Quadratic Trend B	Quadratic Trend AB	Cubic Trend B	Cubic Trend AB	Quartic Trend B	Quartic Trend AB
# 9	F	1.72	1.76	0.12	4.44	0.04	0.28	2.52	0.03	0.35	0.46
	P	.086	.078	.728	.043	.837	.605	.122	.854	.566	.512
#10	F	1.17	2.11	0.25	4.99	0.67	0.79	2.73	0.59	0.08	2.54
	P	.312	.029	.625	.033	.574	.778	.108	.547	.782	.121
#11	F	0.97	2.92	0.68	0.05	0.00	0.31	1.16	10.39	0.06	2.02
	P	.533	.003	.579	.820	.951	.590	.029	.004	.806	.165
#12	F	1.80	3.03	1.87	0.11	0.12	4.36	0.47	0.60	1.39	11.56
	P	.069	.002	.182	.739	.730	.045	.505	.549	.249	.003
#13	F	1.79	0.41	9.19	1.36	0.20	0.02	1.74	0.60	1.88	0.09
	P	.069	.927	.006	.254	.659	.898	.197	.803	.180	.761
#14	F	0.78	0.47	2.96	1.79	1.07	0.67	0.00	1.25	1.05	0.05
	P	.635	.093	.095	.191	.312	.573	.983	.275	.317	.817
#15	F	0.61	0.88	0.07	3.40	0.02	0.08	0.81	0.99	0.78	2.39
	P	.789	.543	.796	.074	.888	.771	.619	.671	.611	.132
#16	F	3.18	1.11	3.52	0.43	1.38	0.69	4.36	0.00	4.69	0.01
	P	.002	.354	.069	.525	.250	.580	.045	.989	.038	.939

TABLE B11

INTERCORRELATION MATRIX AND PROBABILITY LEVELS OF MANN'S SIXTEEN CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 1 (TASK)

Category		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
# 1	R	1.000															
# 2	R	-.403	1.000														
# 3	R	-.278	.070	1.000													
# 4	R	.548*	-.188	-.129	1.000												
# 5	R	.338	-.478	.167	.073	1.000											
# 6	R	-.137	.447	-.186	-.460	-.143	1.000										
# 7	R	.634**	-.541*	.028	.639**	.462	-.531*	1.000									
# 8	R	.488	-.138	-.443	.187	.558**	.301	.035	1.000								
# 9	R	-.535*	.281	-.227	.167	-.558**	-.162	-.019	-.344	1.000							
#10	R	-.377	.635	-.286	.002	-.393	.015	.127	-.287	.733**	1.000						
#11	R	.046	.759**+	.182	.013	-.342	.426	-.300	-.079	-.127	-.259	1.000					
#12	R	.436	-.304	-.289	.667**	.230	-.526*	.757**	.251	.346	.355	-.342	1.000				
#13	R	.372	-.104	.280	.435	.223	-.577**	.535**	-.420	.072	-.172	.067	.327	1.000			
#14	R	.199	-.256	.047	-.059	.426	-.049	-.274	.558**	-.442	-.507*	.019	.034	-.335	1.000		
#15	R	-.193	.785**	-.029	.095	-.183	.232	-.515*	.255	.096	-.321	.616**	-.144	-.198	.199	1.000	
#16	R	-.384	-.195	.776**	-.332	.479	-.135	-.124	-.092	-.430	-.484	-.223	-.393	-.059	.397	-.050	1.000

* $p < .01$

** $p < .05$

\+ The underlined correlated variables (e.g., .759) have been used to illustrate phase movement in this study.

TABLE B12

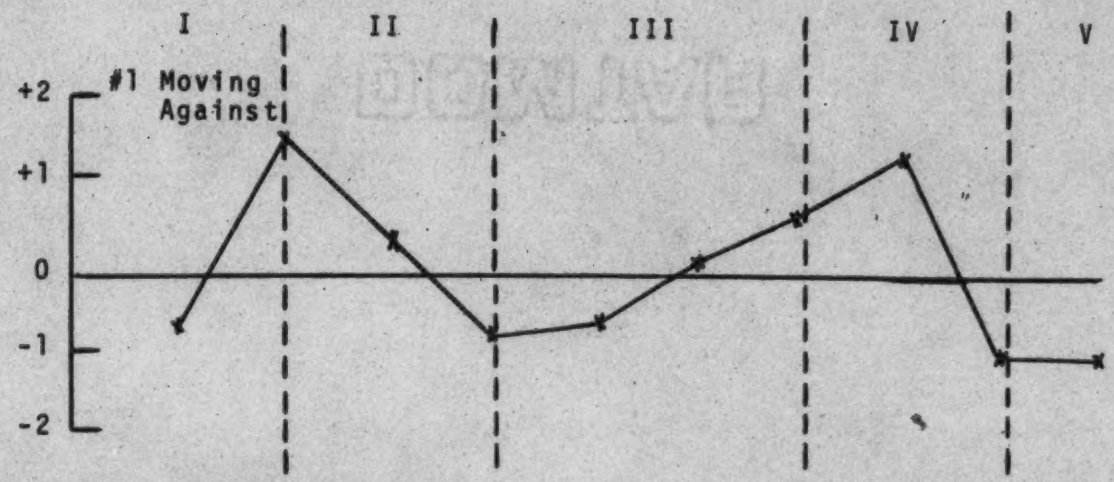
INTERCORRELATION MATRIX AND PROBABILITY LEVELS OF MANN'S SIXTEEN CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 2 (SOCIAL-EMOTIONAL)

Category		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
# 1	R	1.000															
# 2	R	-.242	1.000														
# 3	R	.190	.302	1.000													
# 4	R	-.295	-.597**	-.352	1.000												
# 5	R	-.216	.023	-.299	.414	1.000											
# 6	R	-.341	.619***	-.120	-.082	.672**	1.000										
# 7	R	-.333	.232	-.135	-.023	.705	.152	1.000									
# 8	R	.386	-.001	.076	-.484	-.383	-.353	-.257	1.000								
# 9	R	-.255	-.597**	-.170	.608**	-.313	-.340	-.258	-.372	1.000							
#10	R	-.400	-.287	-.189	.778	-.391	-.035	-.086	.027	.641**	1.000						
#11	R	-.001	.564*	.734**	-.501*	-.510*	.203	-.027	-.094	.018	.184	1.000					
#12	R	.280	-.558**	-.477	.337	.293	-.181	-.338	-.005	.661**	.452	-.140	1.000				
#13	R	.190	.552**	.259	-.475	.384	.683**	-.090	.258	-.748**	-.382	.261	-.366	1.000			
#14	R	.176	-.745	-.405	-.136	-.478	-.253	-.511*	.584**	.311	.427	-.127	.677**	-.126	1.000		
#15	R	.458	-.411	-.321	.108	.198	.022	-.355	.141	-.055	.119	-.412	.144	.022	.205	1.000	
#16	R	.033	-.396	-.262	.008	-.228	-.126	-.561**	.536*	.318	.690**	-.170	.512*	-.061	.790**	.464	1.000

* p < .01
** p < .05
- The underlines correlated variables (e.g., .619) have been used to illustrate phase movement in this study.

FIGURE B1

PLOTS OF Z-SCORE VALUES OF MANN'S HOSTILITY CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 1



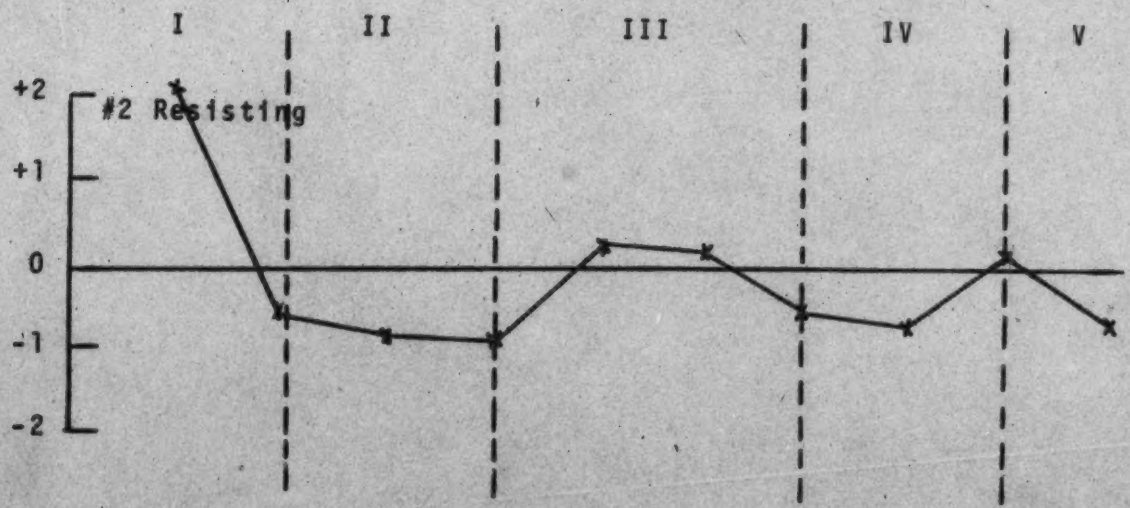
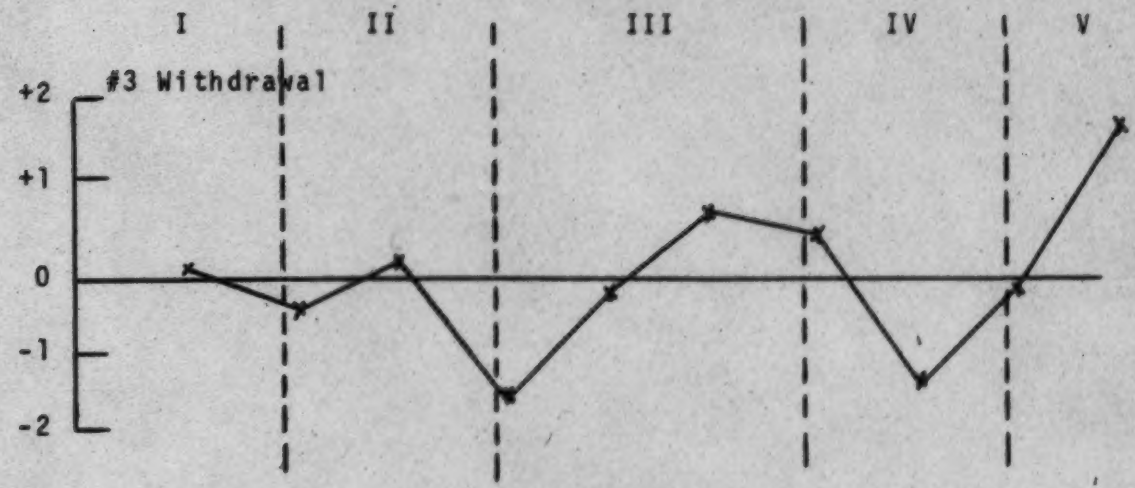


FIGURE B1 (CONTINUED)



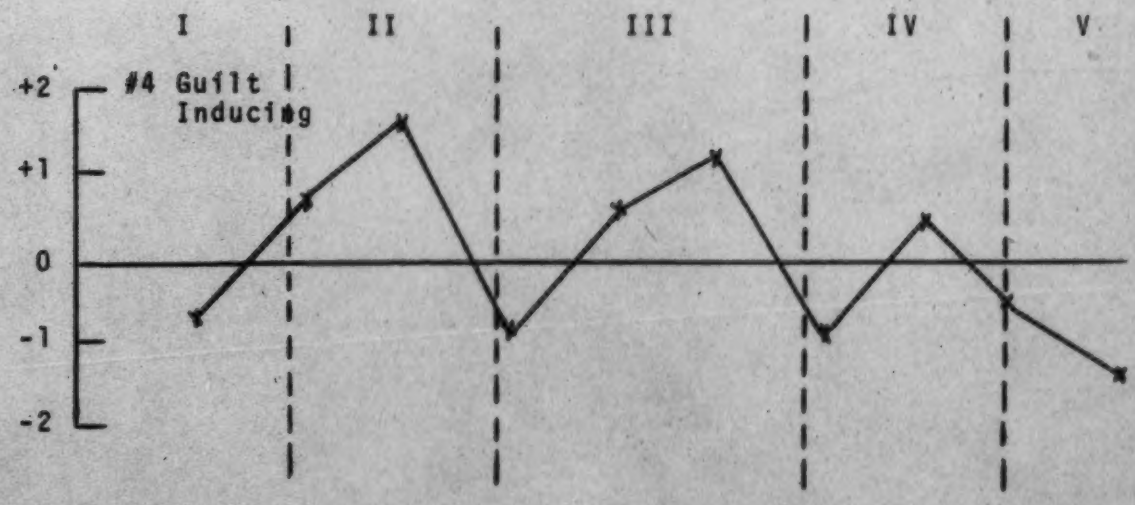
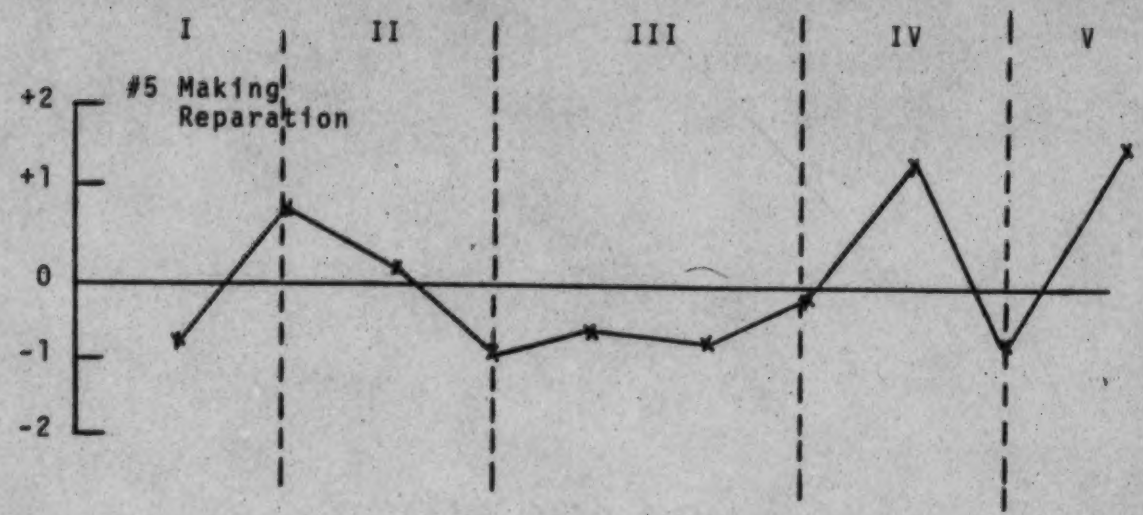


FIGURE B2

PLOTS OF Z-SCORE VALUES OF MANN'S AFFECTION CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 1



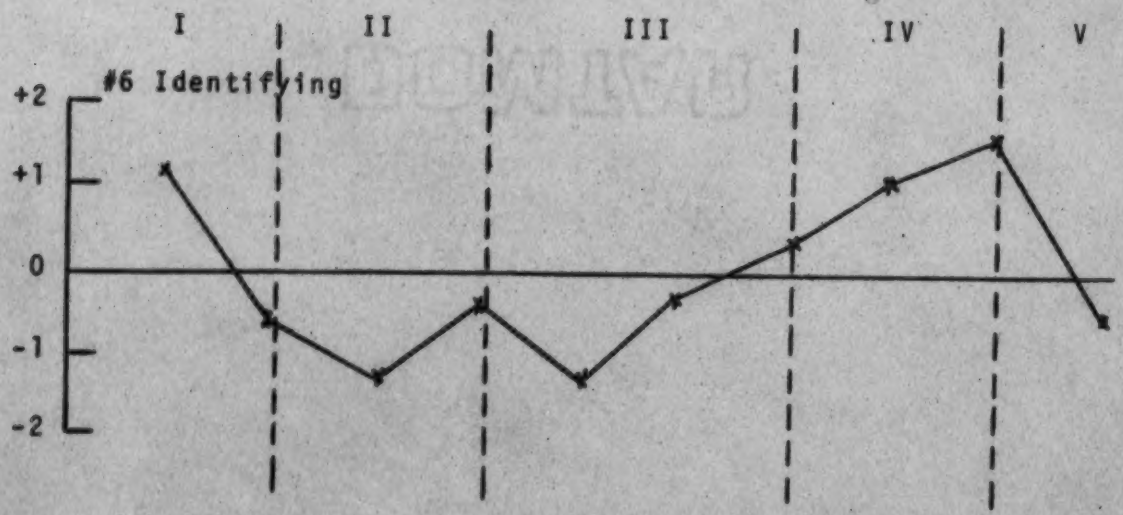
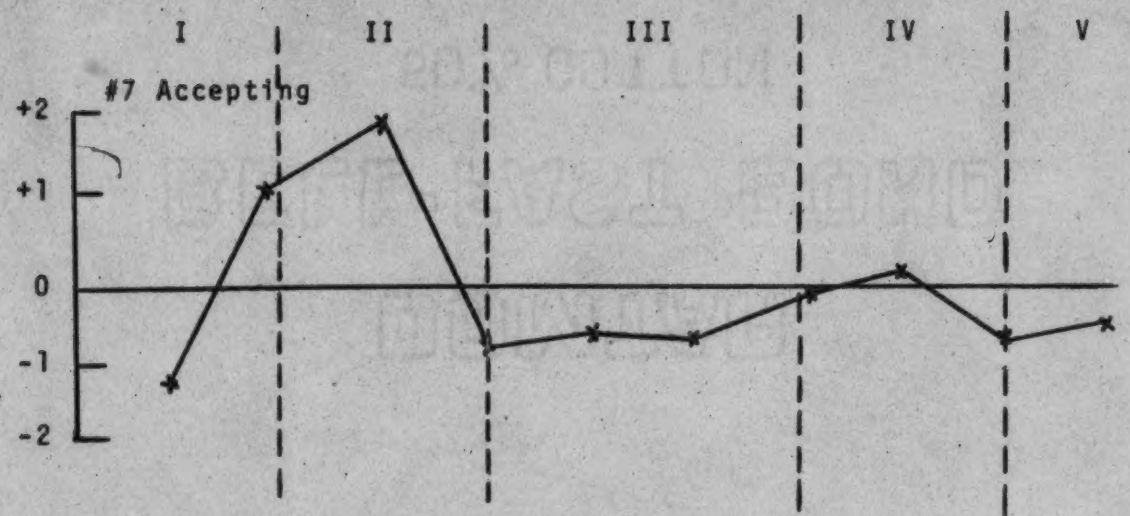


TABLE B2 (CONTINUED)



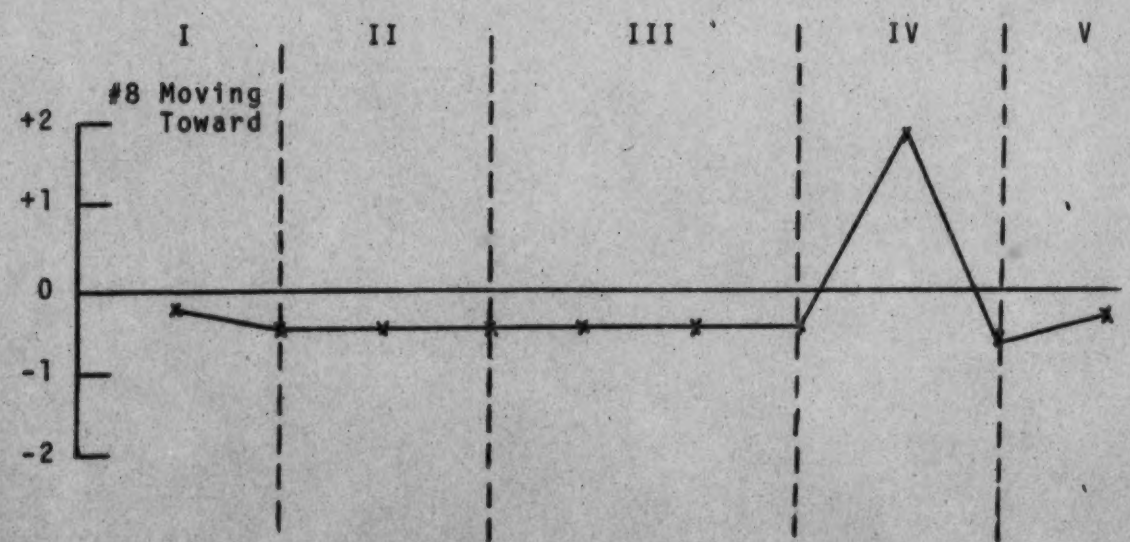
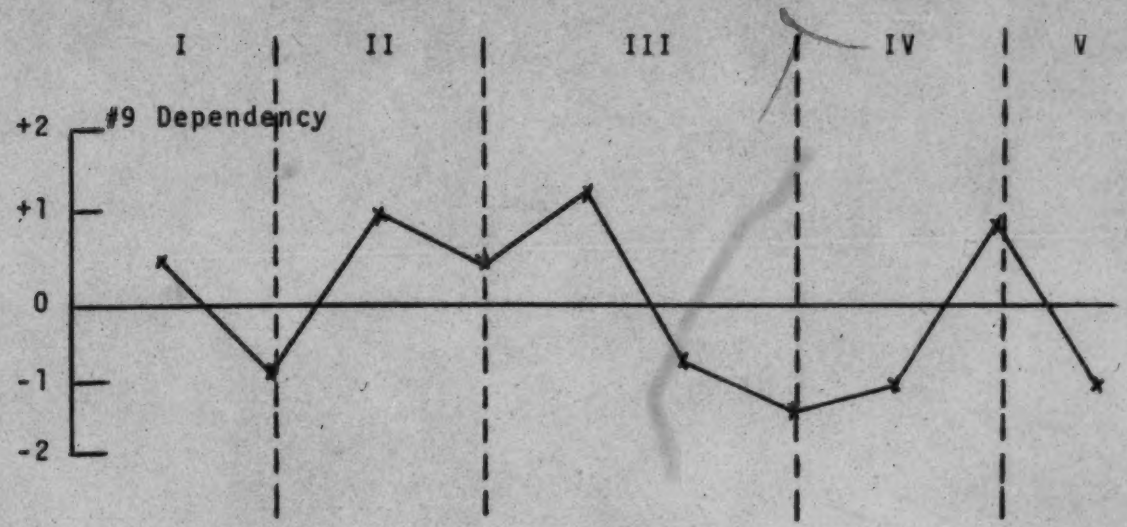


FIGURE B3

PLOTS OF Z-SCORE VALUES OF MANN'S AUTHORITY RELATIONS CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 1



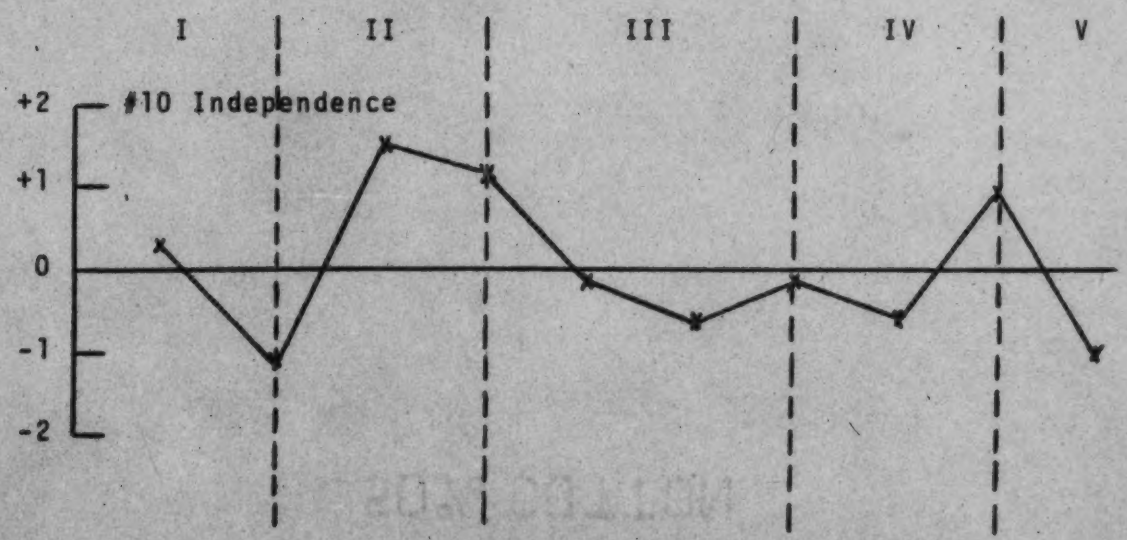
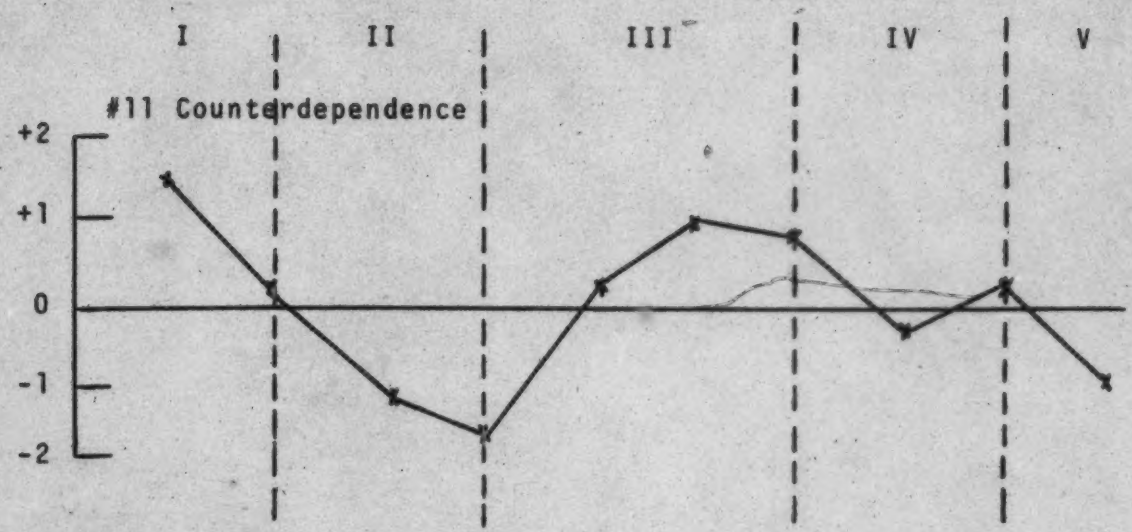


FIGURE B3 (CONTINUED)



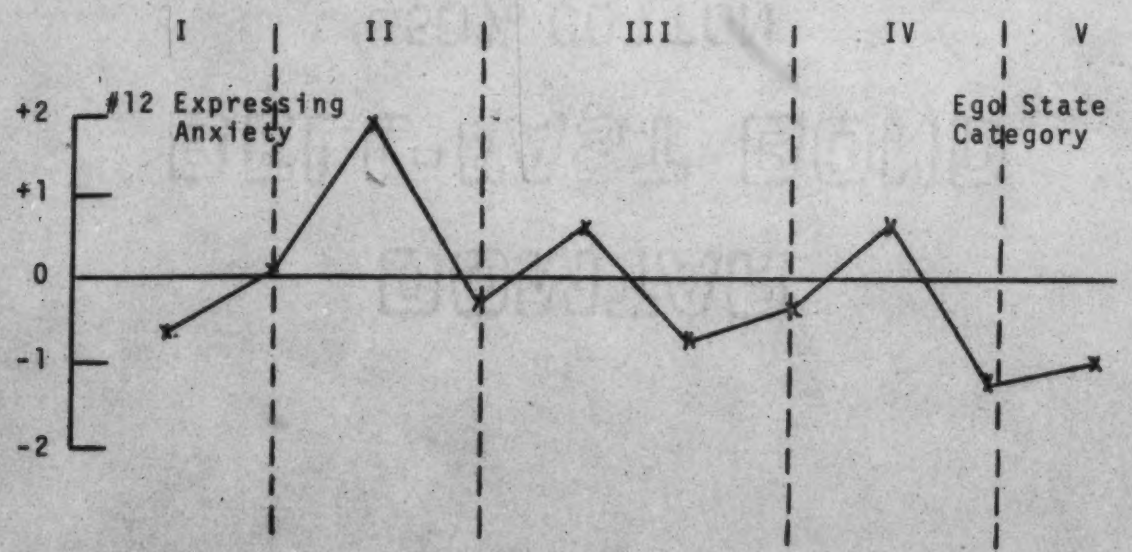
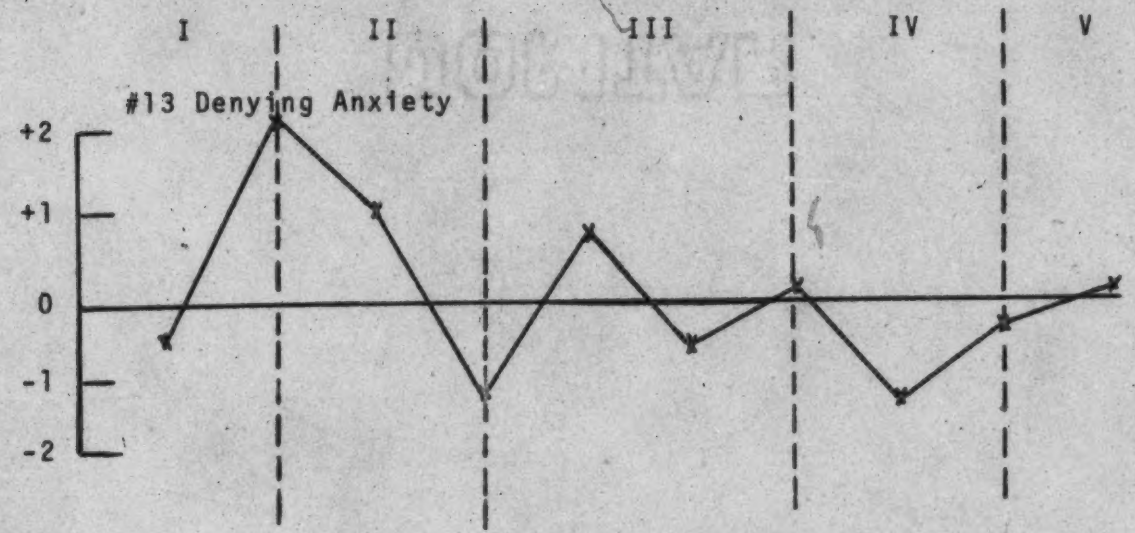


FIGURE B7

PLOTS OF Z-SCORE VALUES OF MANN'S EGO STATE CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 1



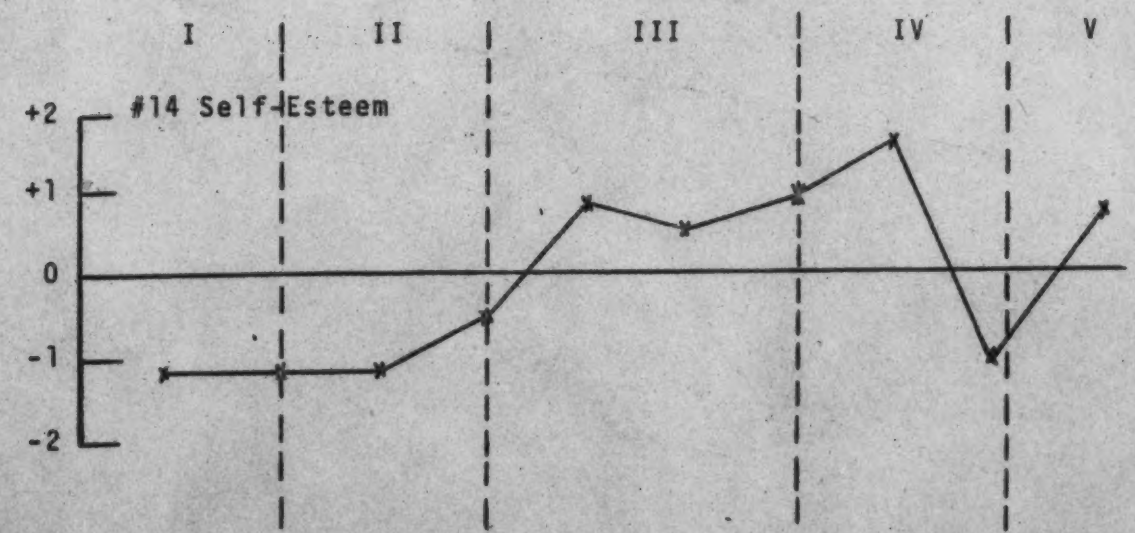
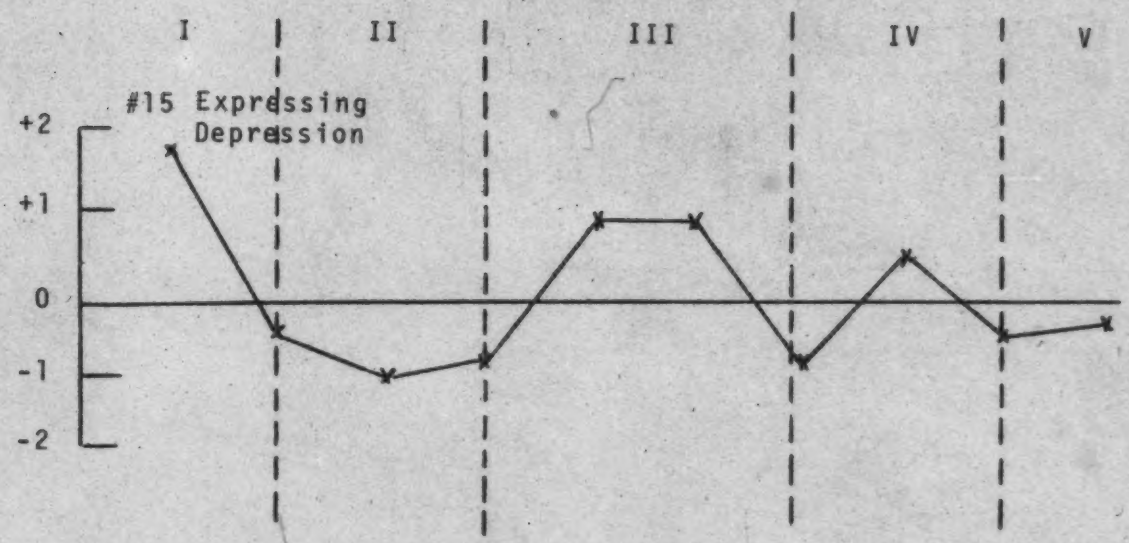


FIGURE B4 (CONTINUED)



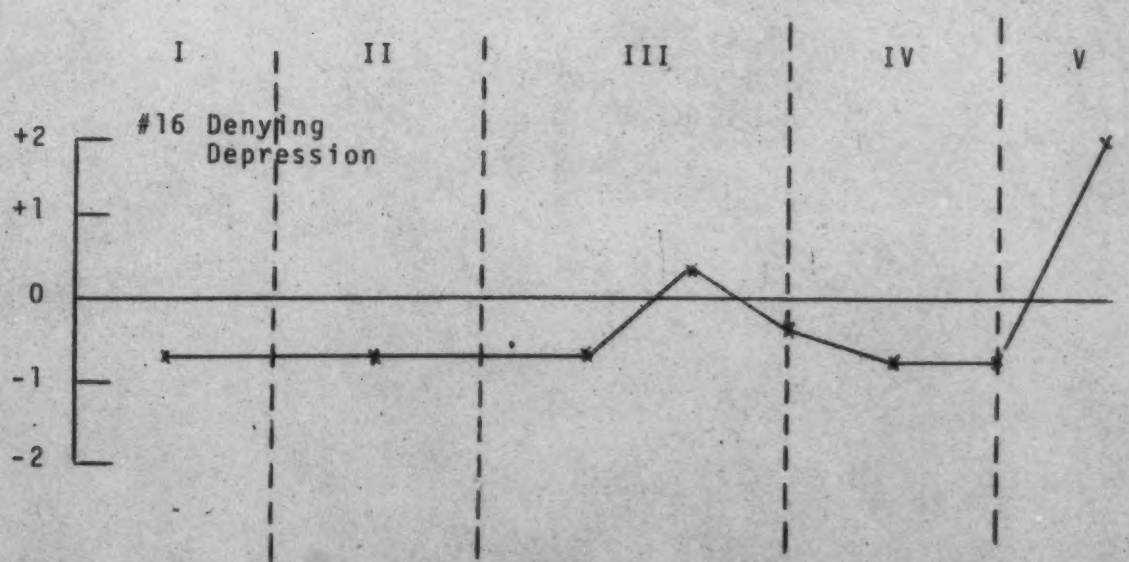
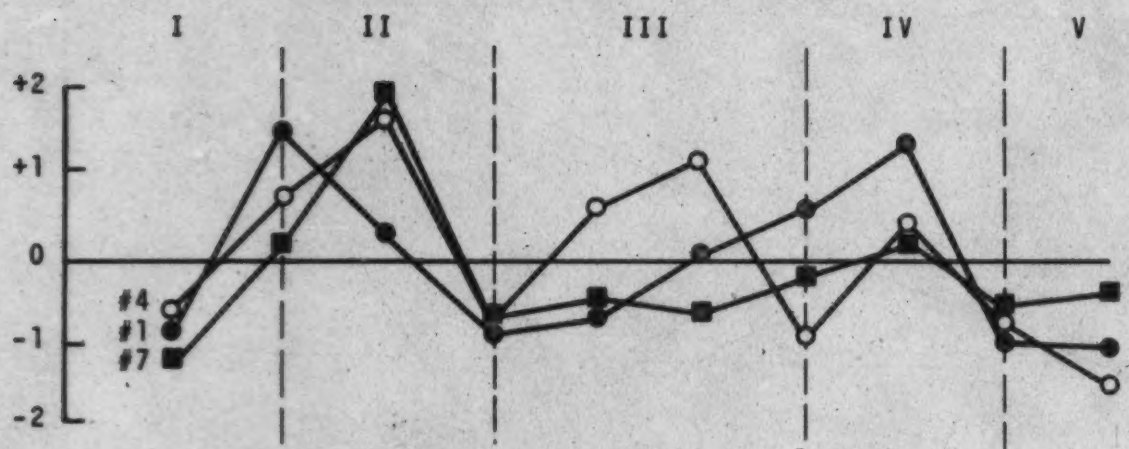


FIGURE B5

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 1
(POSTIVELY CORRELATED)



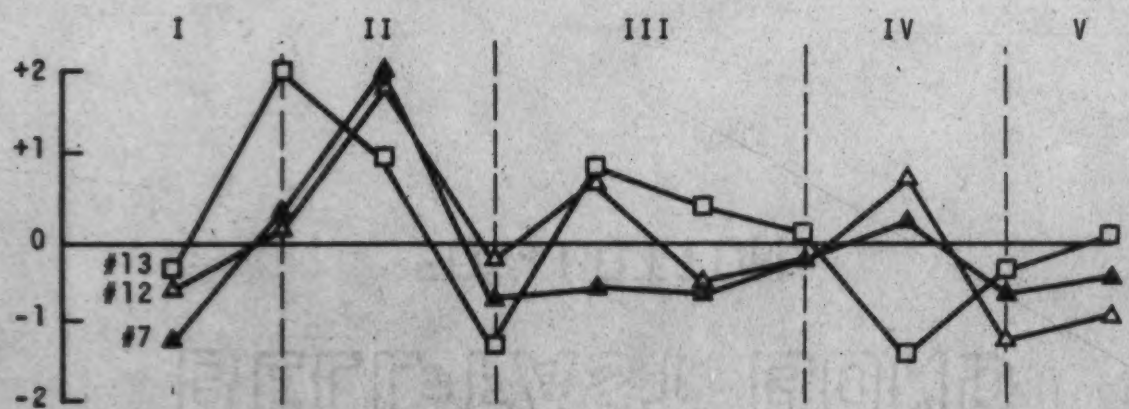


FIGURE B5 (CONTINUED)

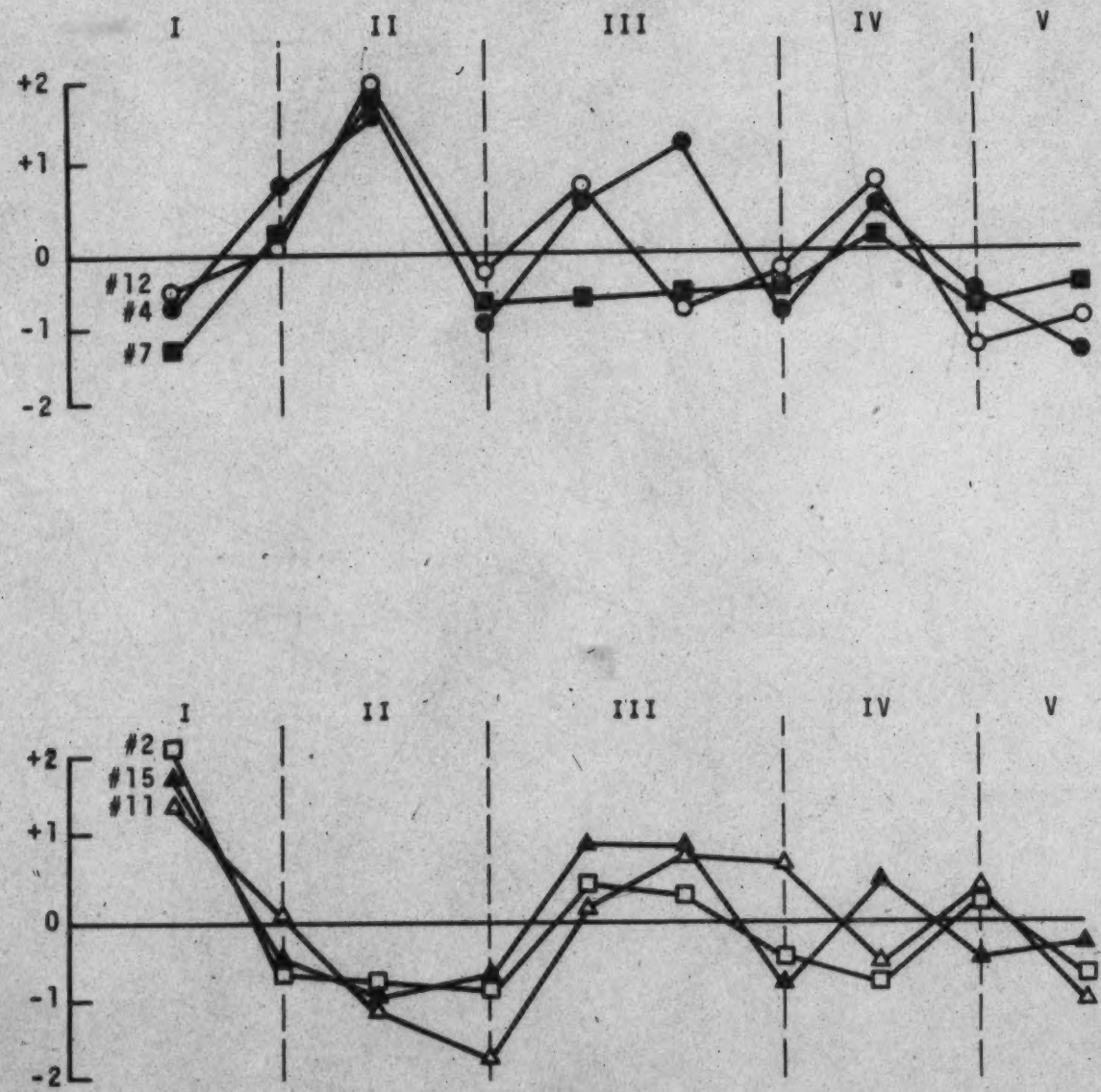
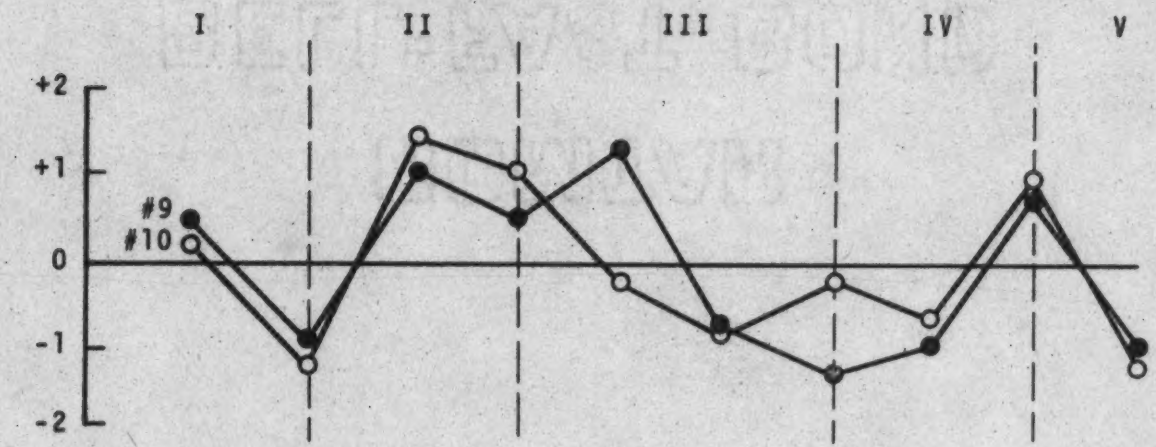


FIGURE B6

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 1
(POSITIVELY CORRELATED)



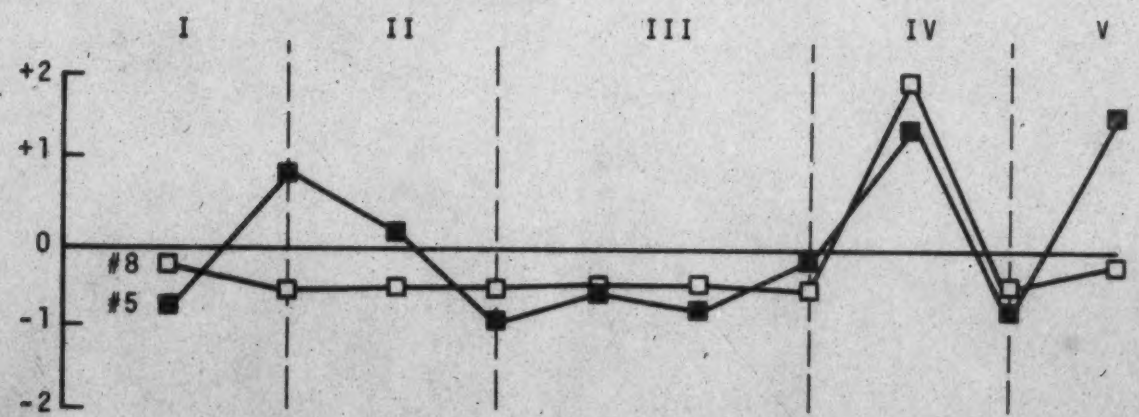
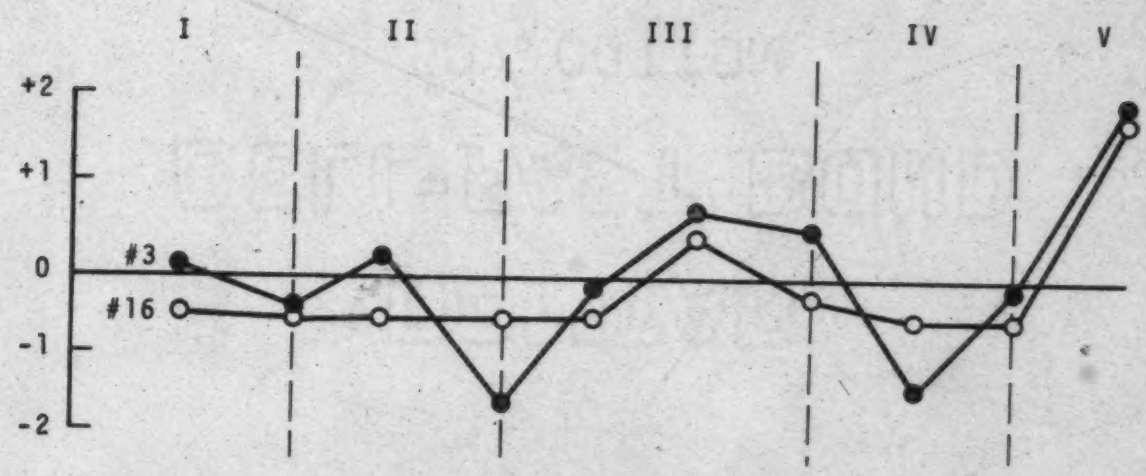


FIGURE B6 (CONTINUED)



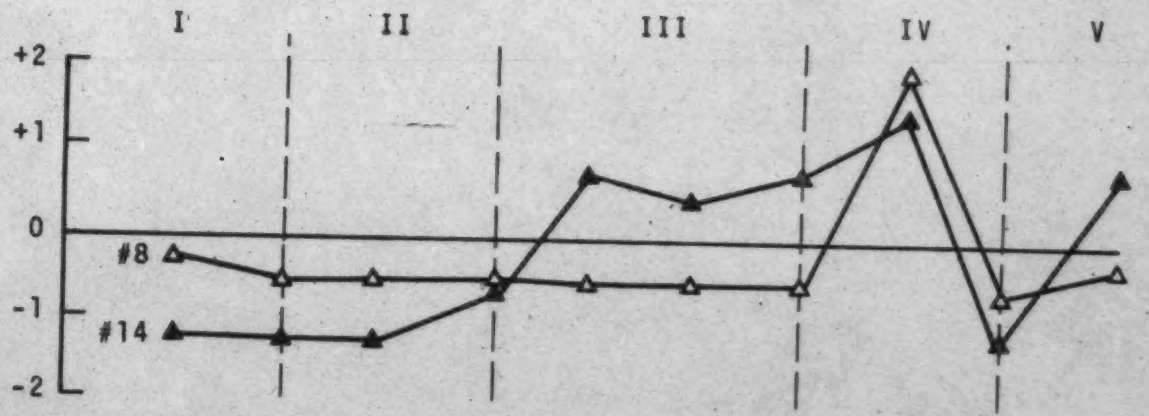


FIGURE B7

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 1
(NEGATIVELY CORRELATED)

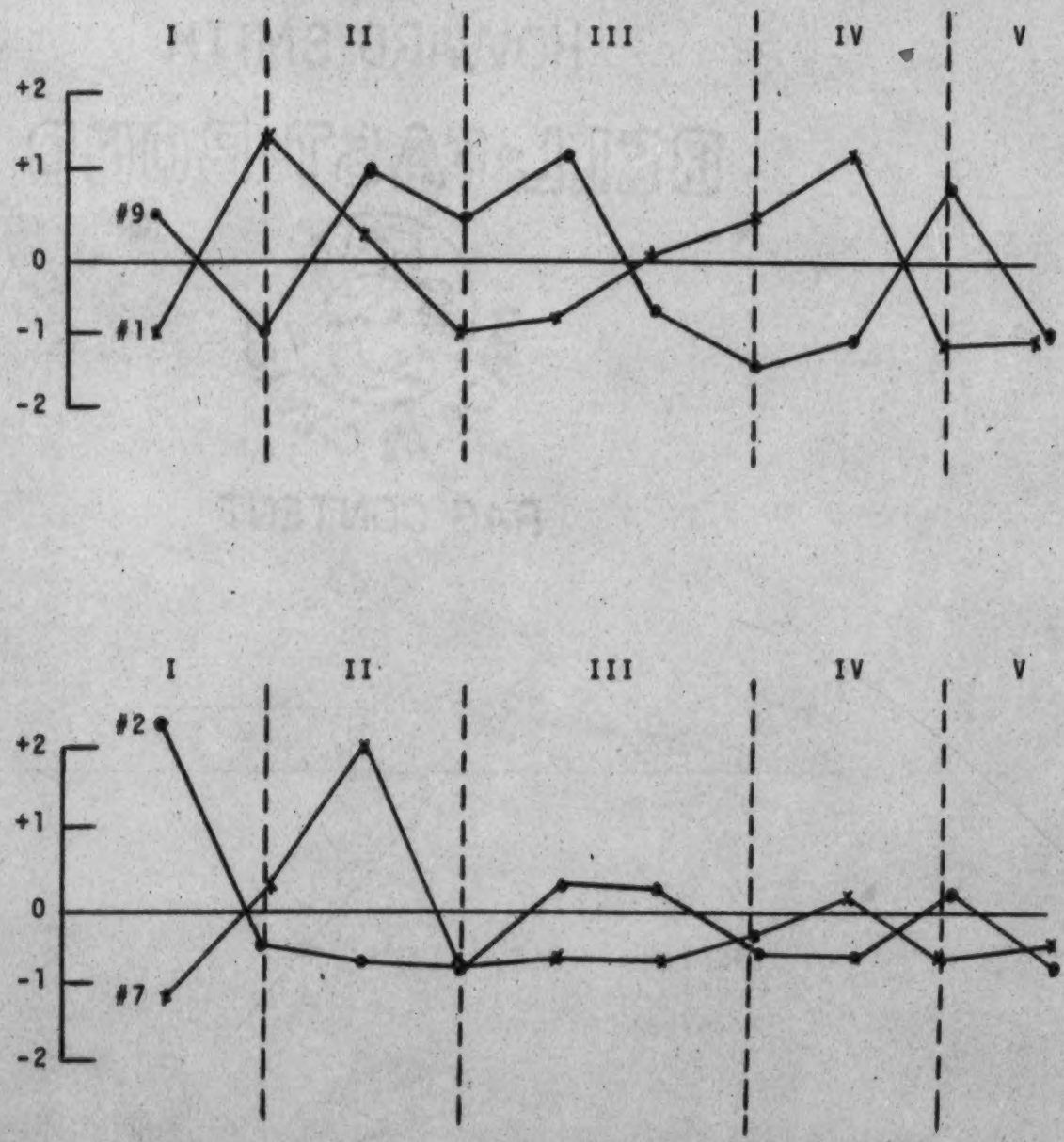
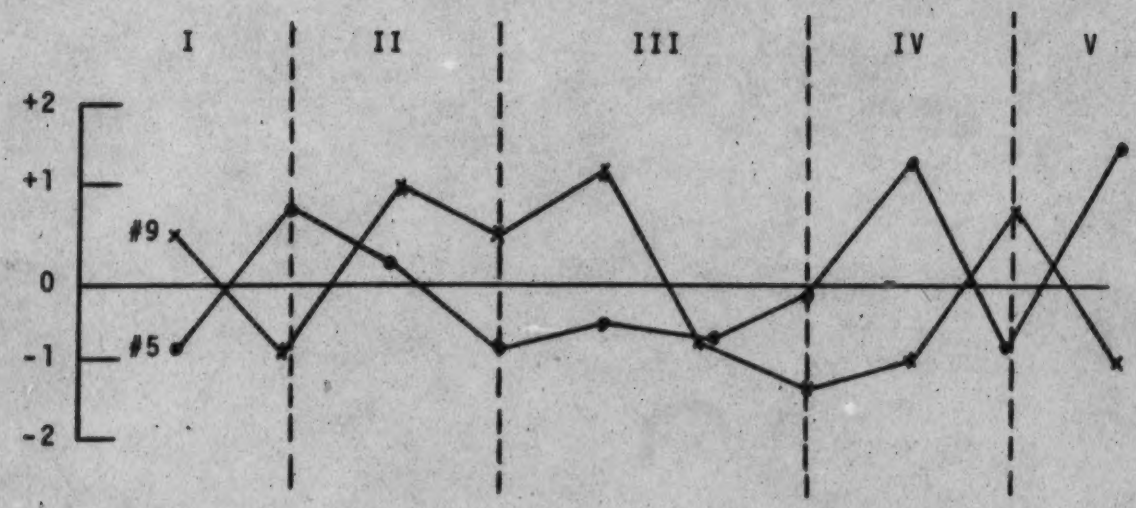


FIGURE B7 (CONTINUED)



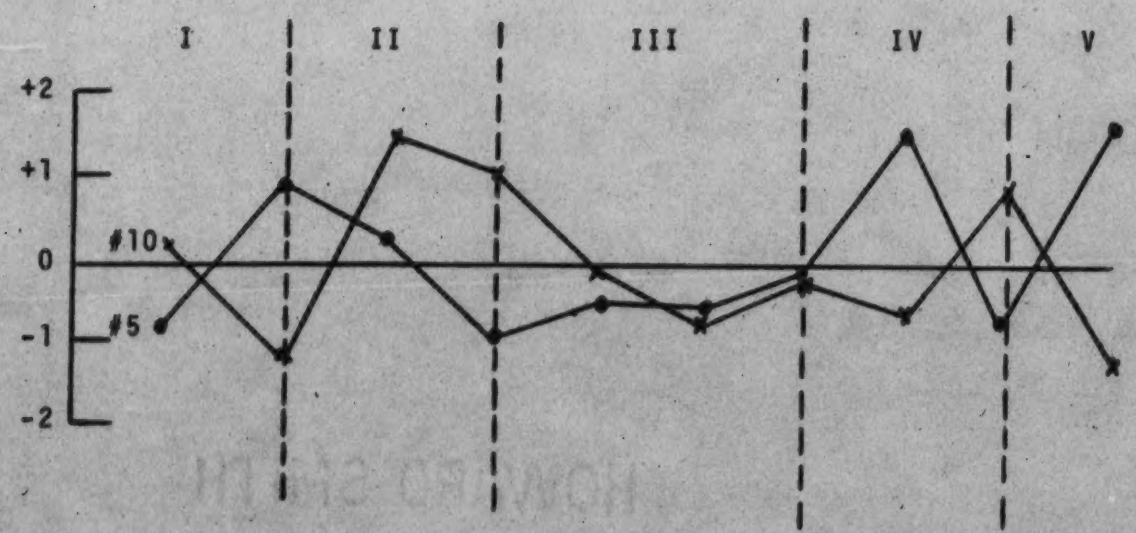
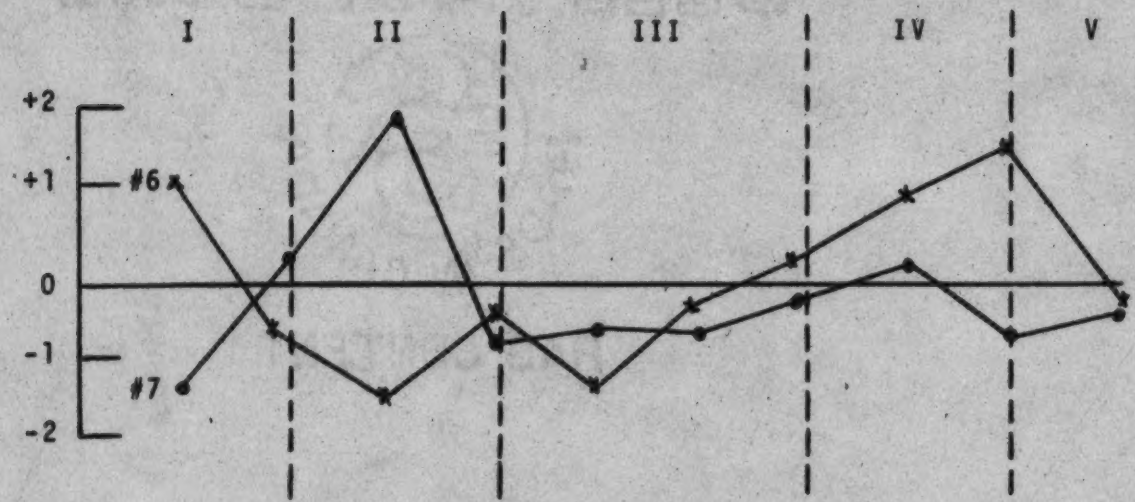


FIGURE B8

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 1
(NEGATIVELY CORRELATED)



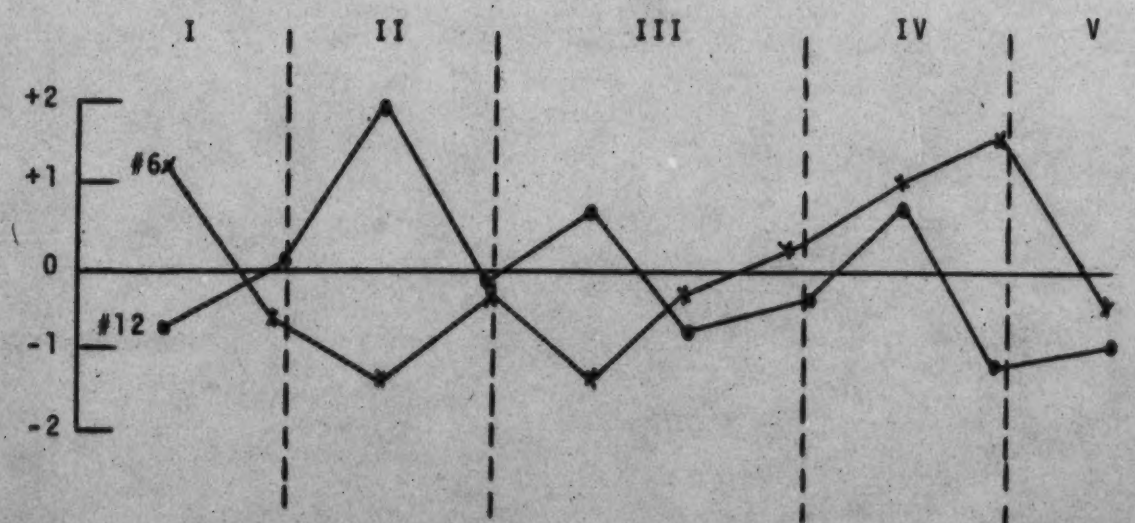
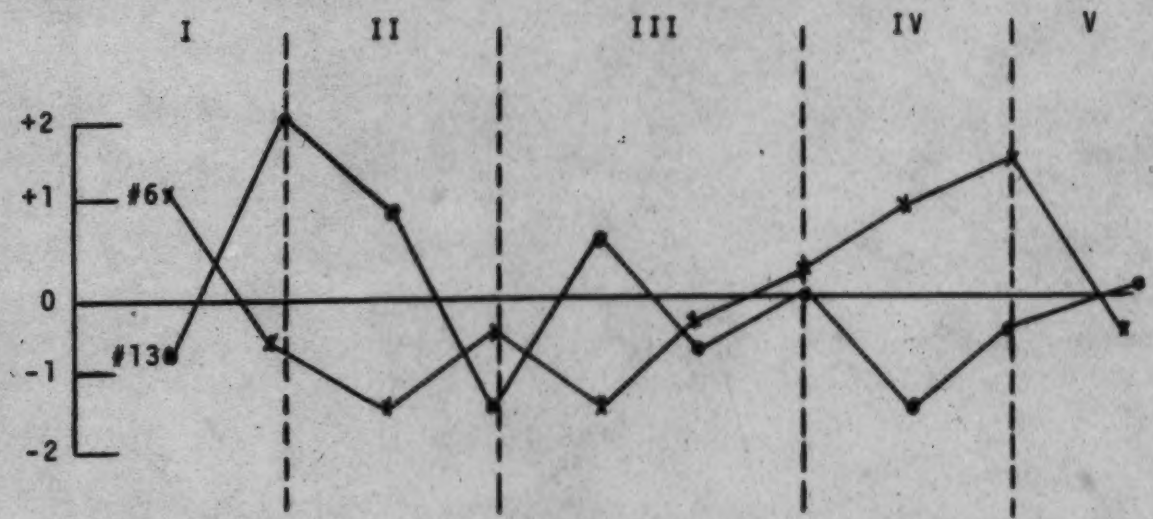


FIGURE B8 (CONTINUED)



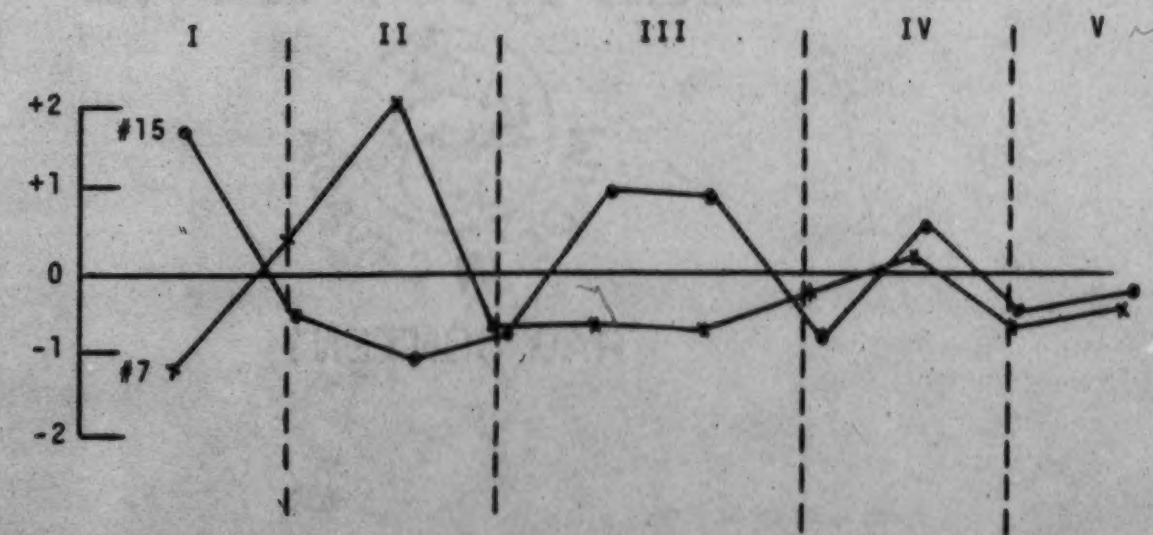


FIGURE B9

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 1
(NEGATIVELY CORRELATED)

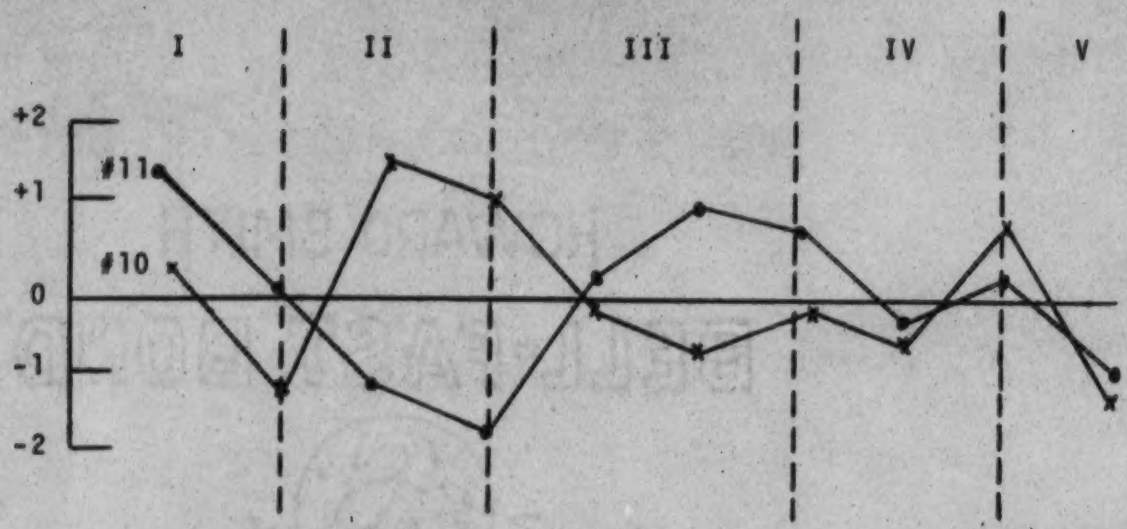
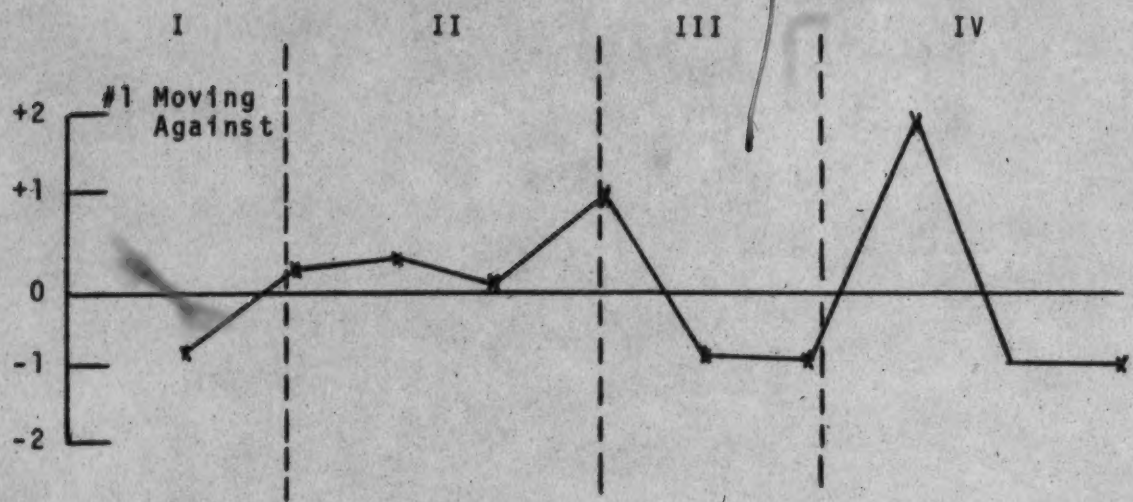


FIGURE B10

PLOTS OF Z-SCORE VALUES OF MANN'S HOSTILITY CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 2



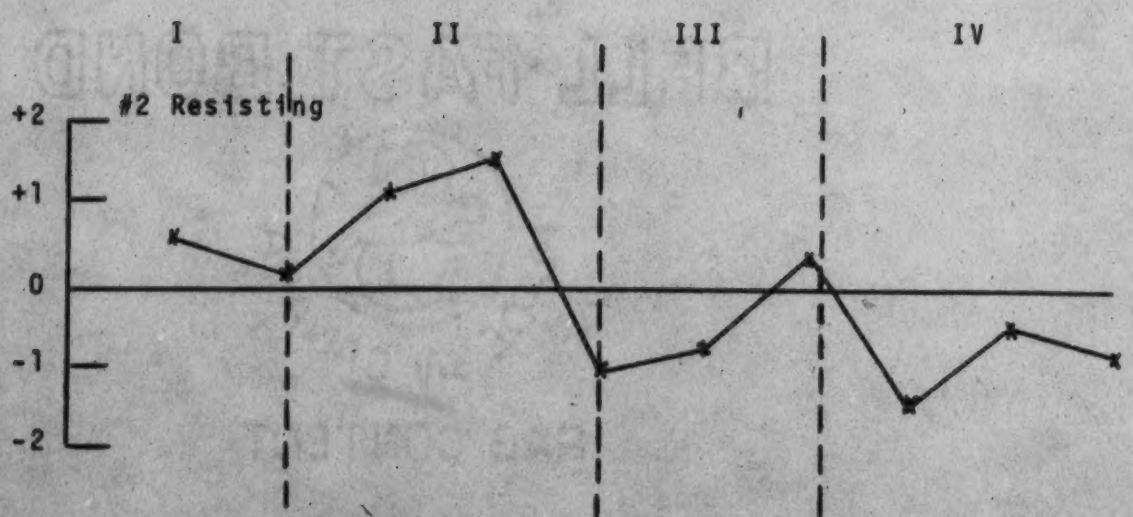
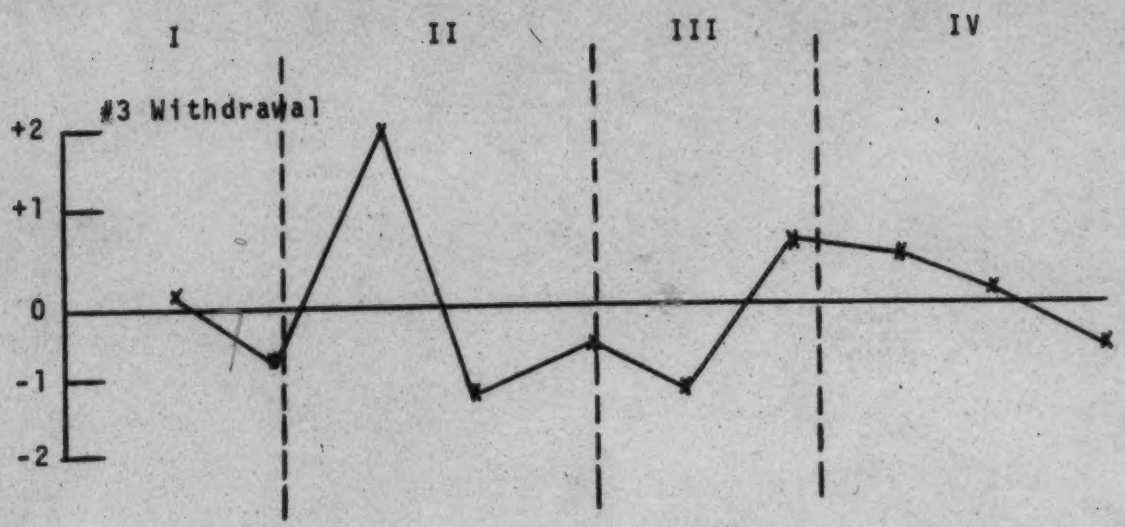


FIGURE B10 (CONTINUED)



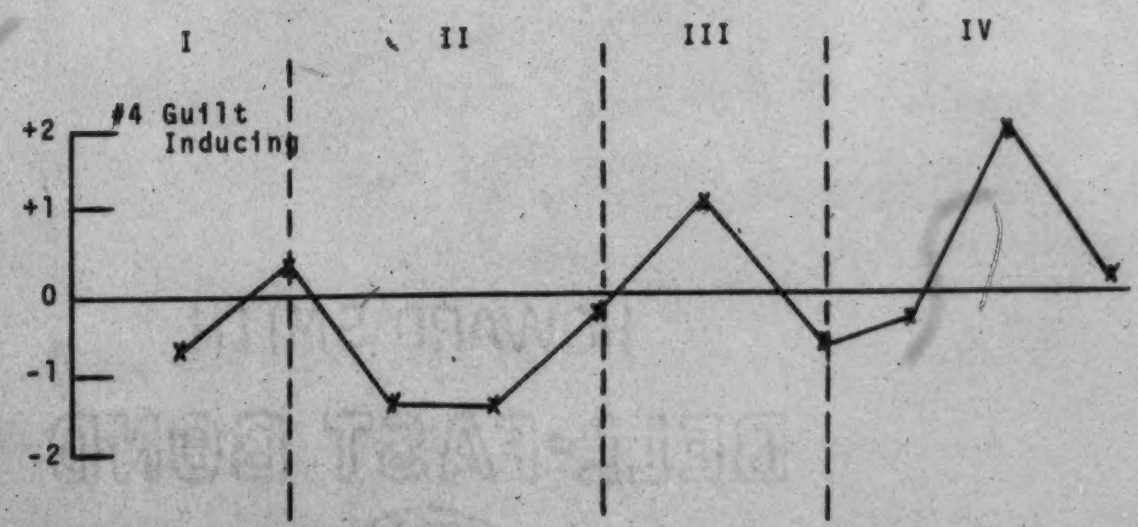
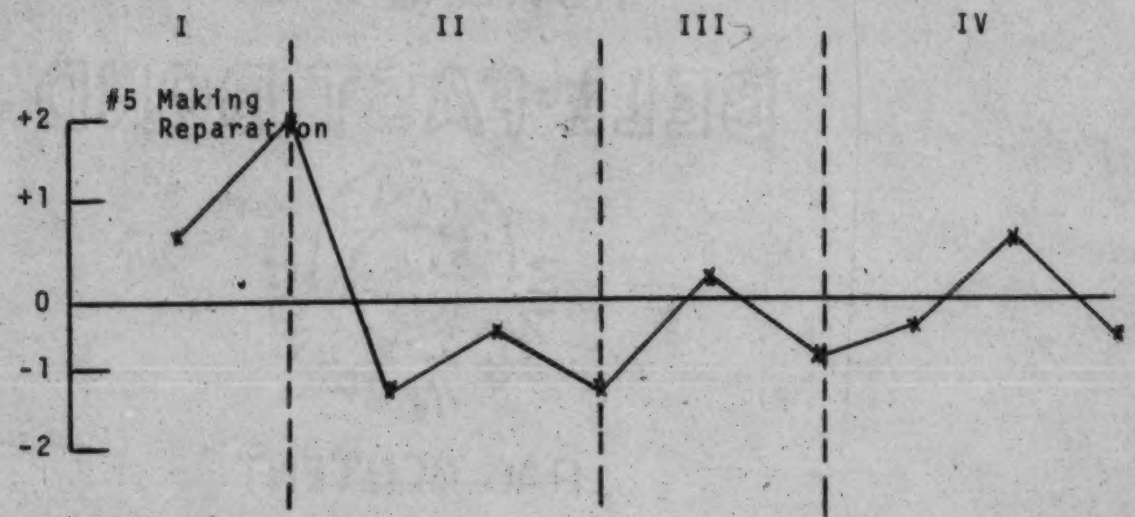


FIGURE B11

PLOTS OF Z-SCORE VALUES OF MANN'S AFFECTION CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 2



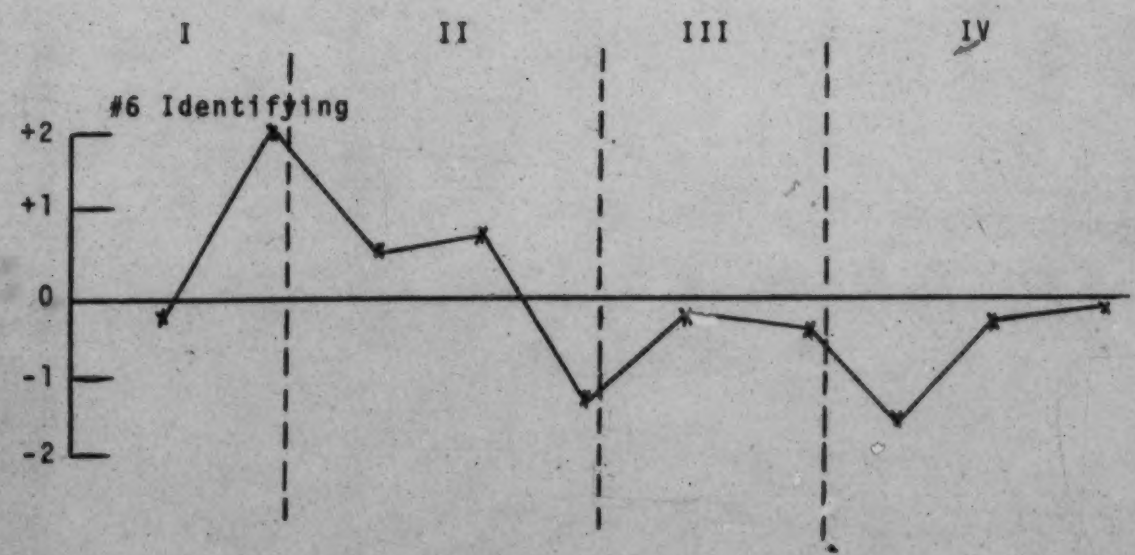
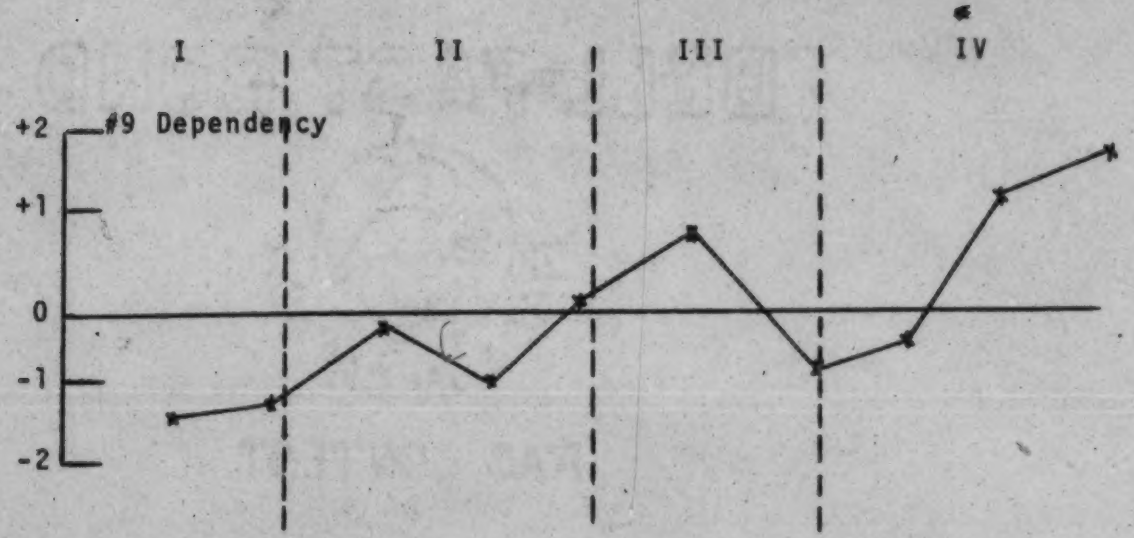


FIGURE B12

PLOTS OF Z-SCORE VALUES OF MANN'S AUTHORITY RELATIONS CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 2



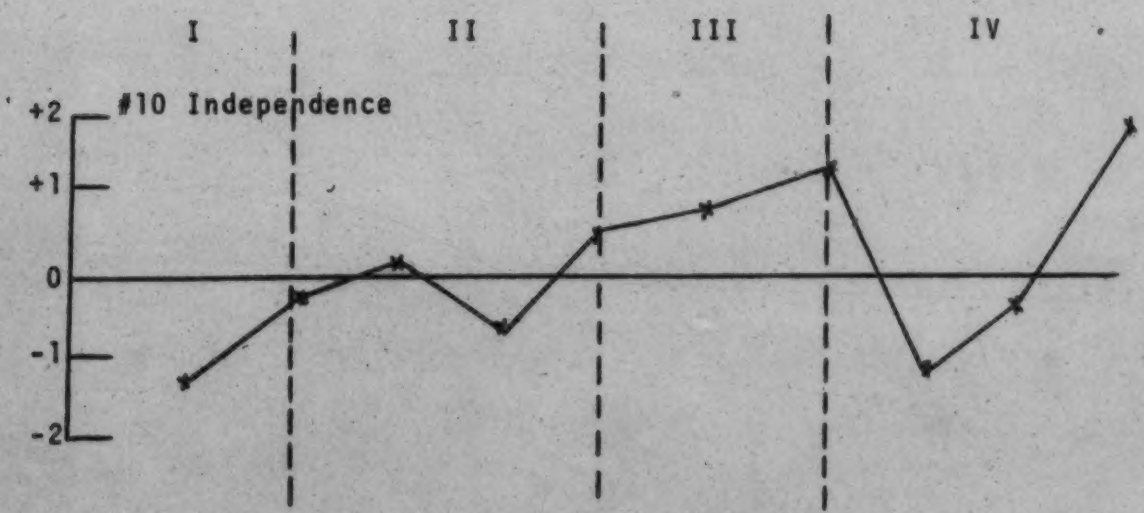
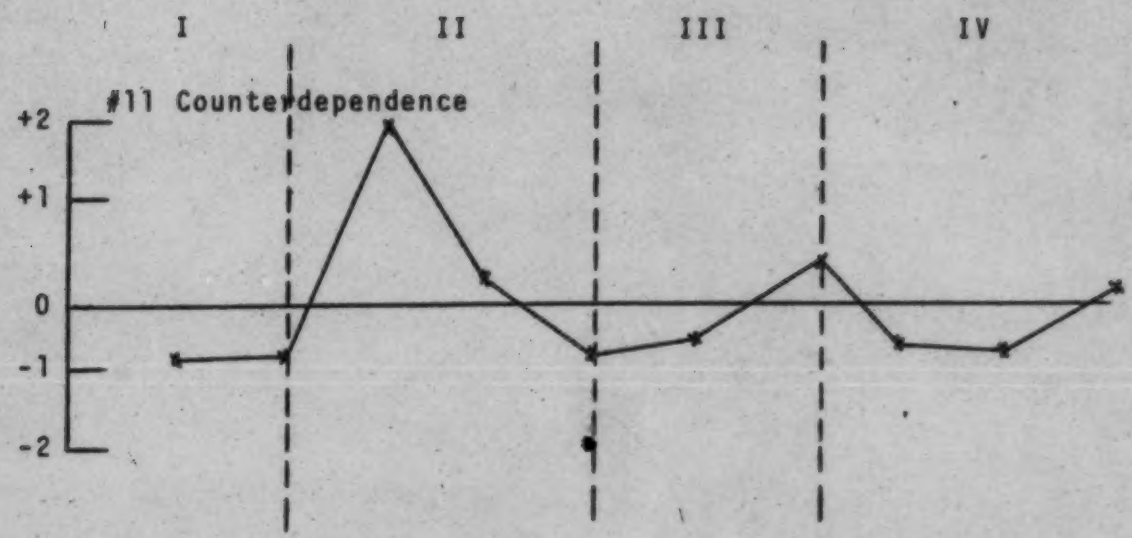


FIGURE B12 (CONTINUED)



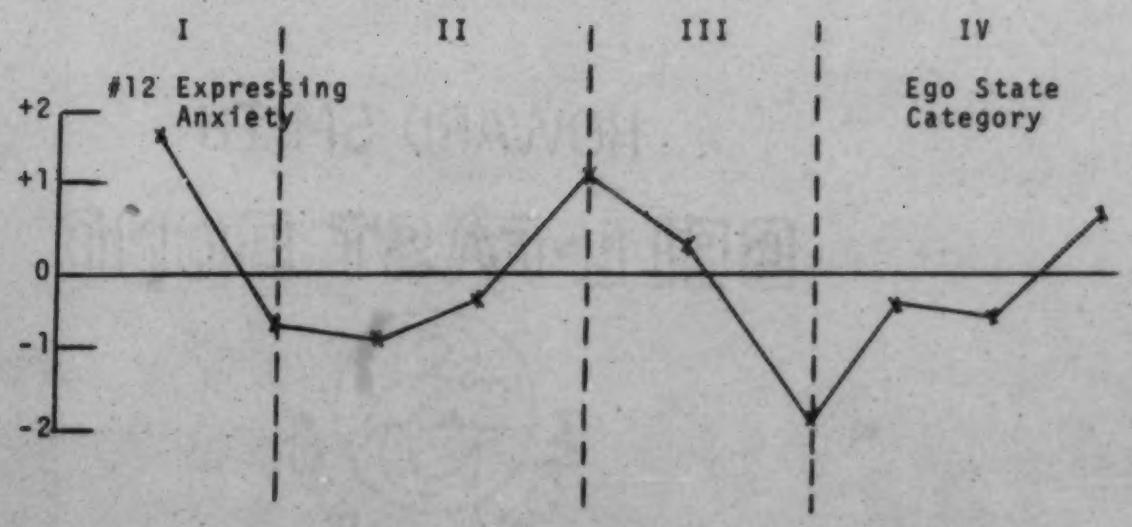
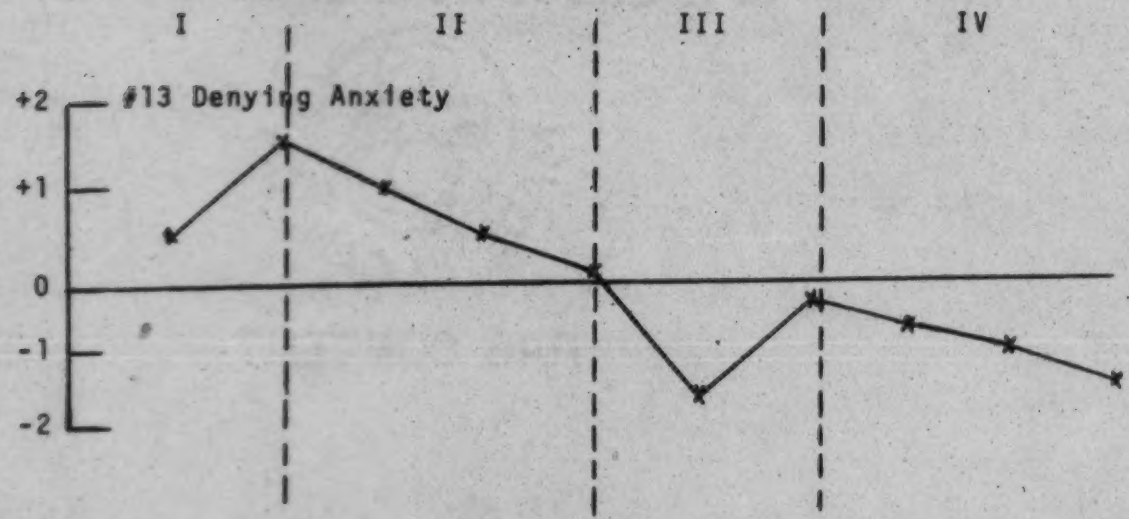


FIGURE B13

PLOTS OF Z-SCORE VALUES OF MANN'S EGO STATE CATEGORIES ACROSS TEN REPEATED MEASURES ON GROUP 2



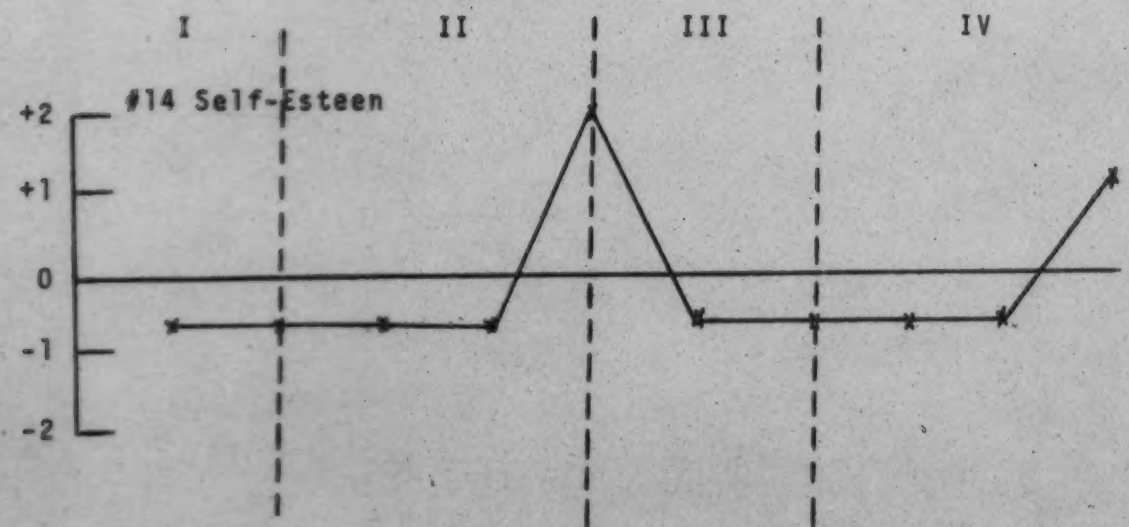
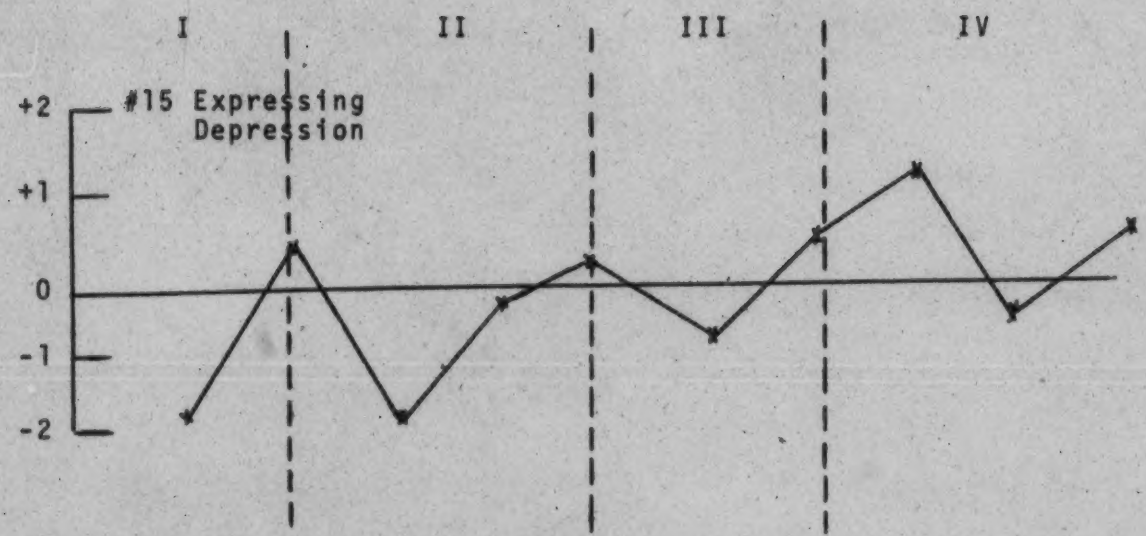


FIGURE B13 (CONTINUED)



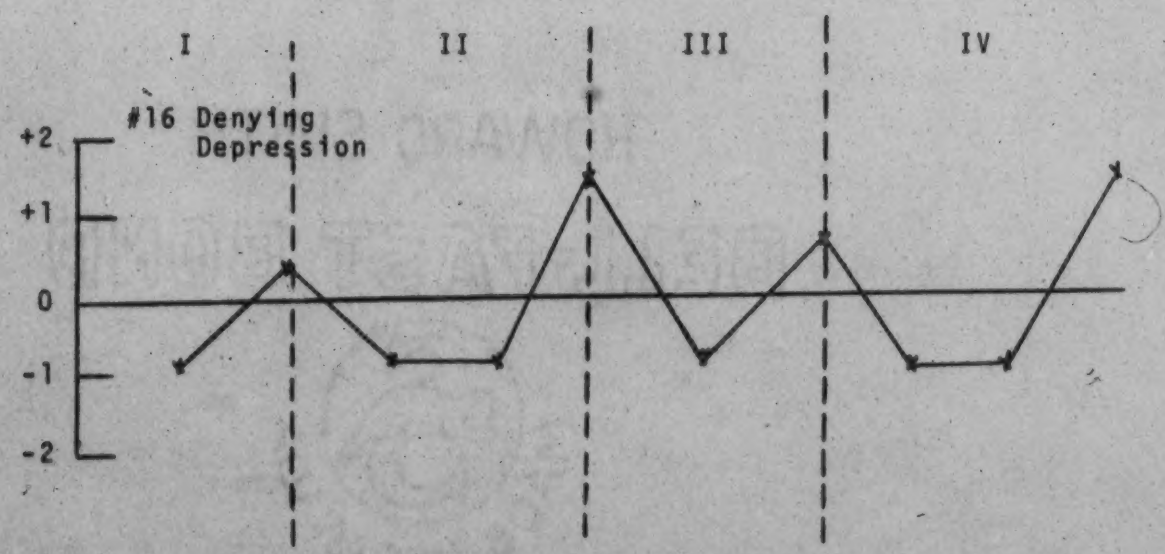


FIGURE B14

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 2
(POSTIVELY CORRELATED)

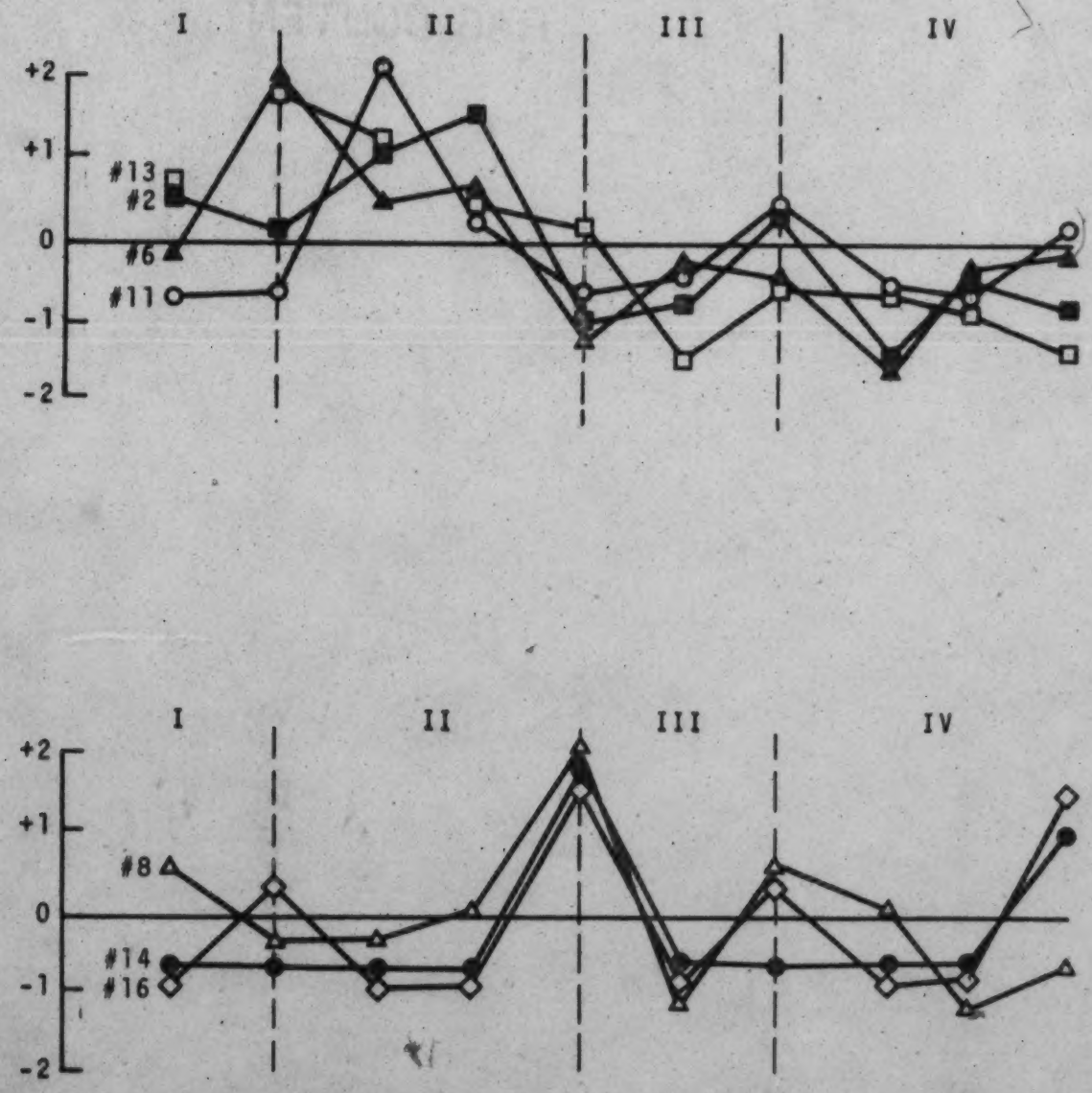
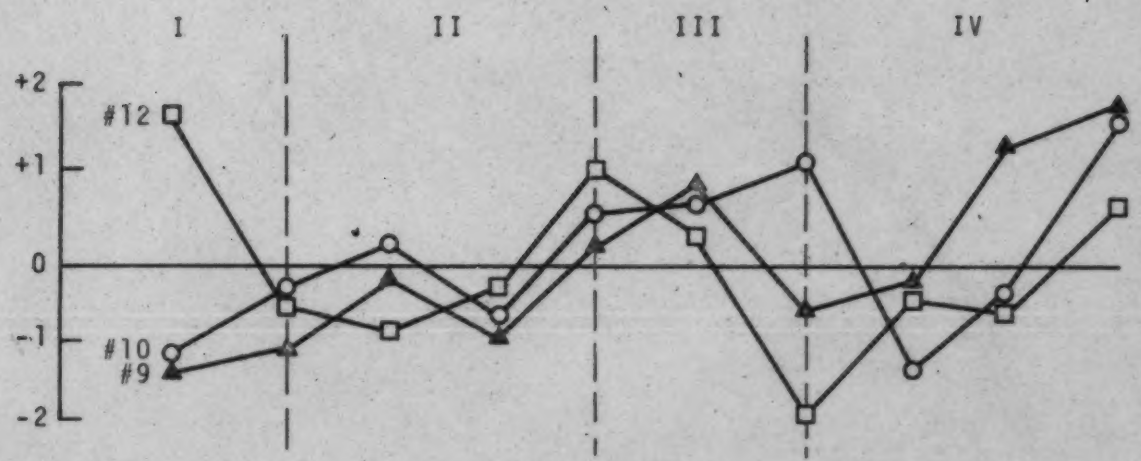


FIGURE B14 (CONTINUED)



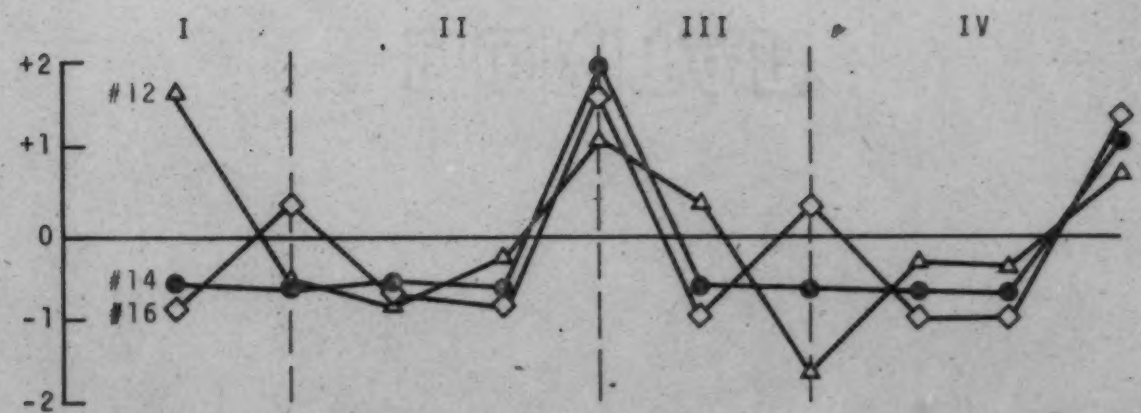
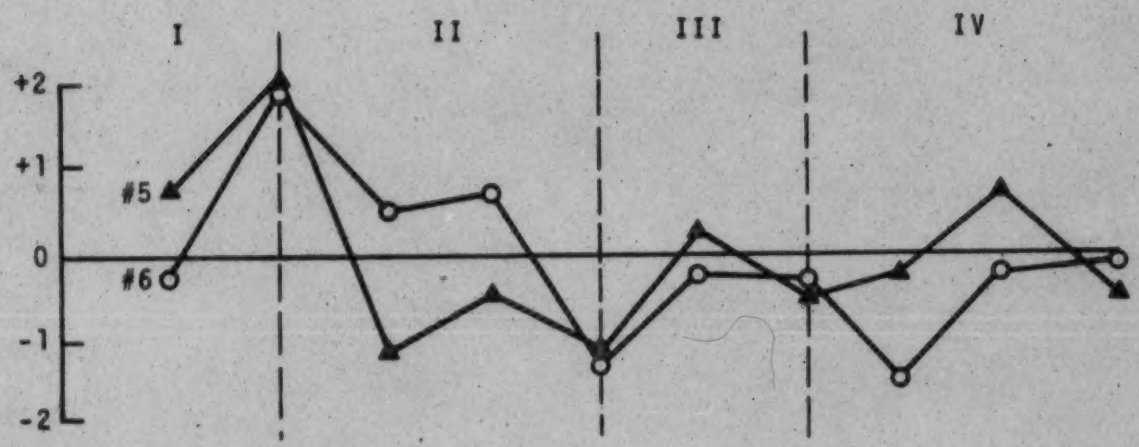


FIGURE B15

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP. 2
(POSITIVELY CORRELATED)



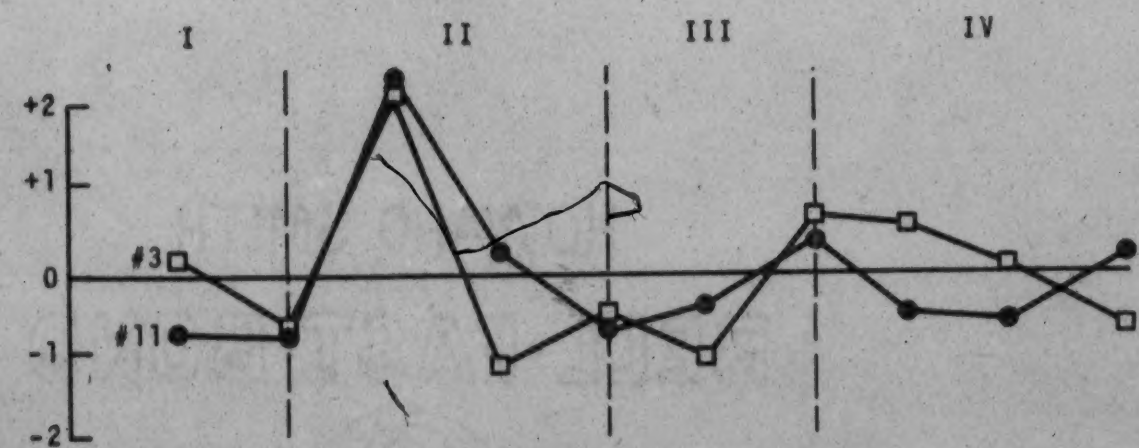
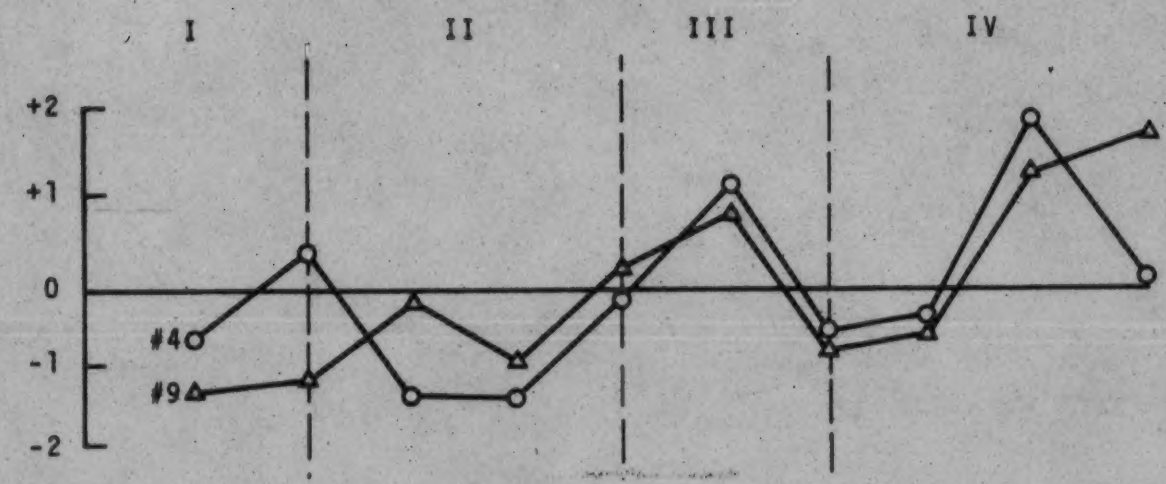


FIGURE B15 (CONTINUED)



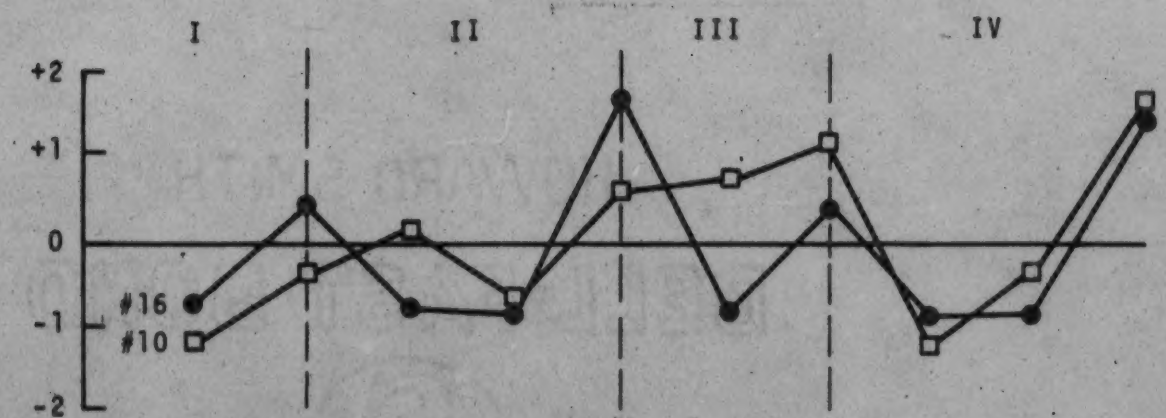
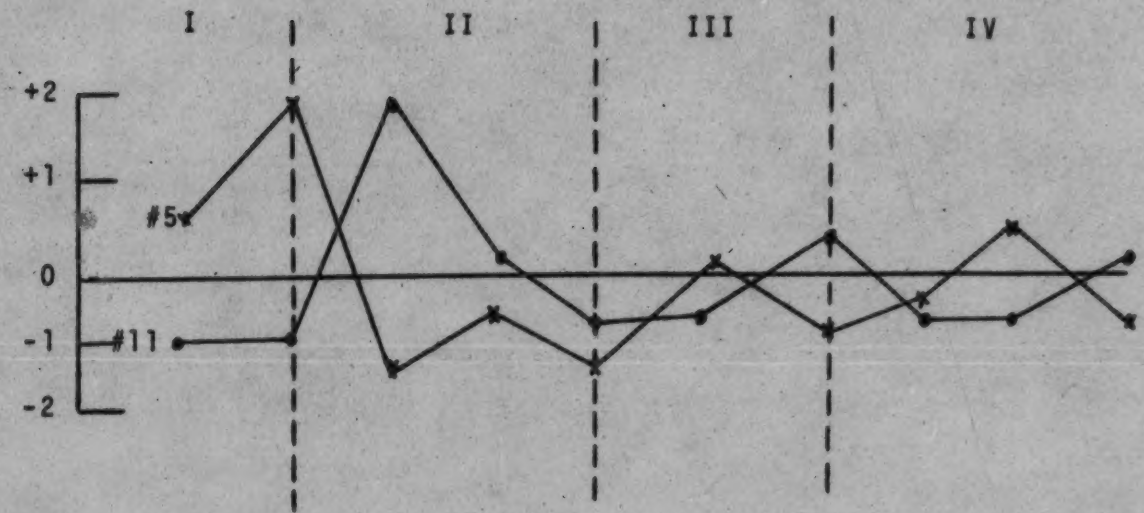


FIGURE B16

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 2
(NEGATIVELY CORRELATED)



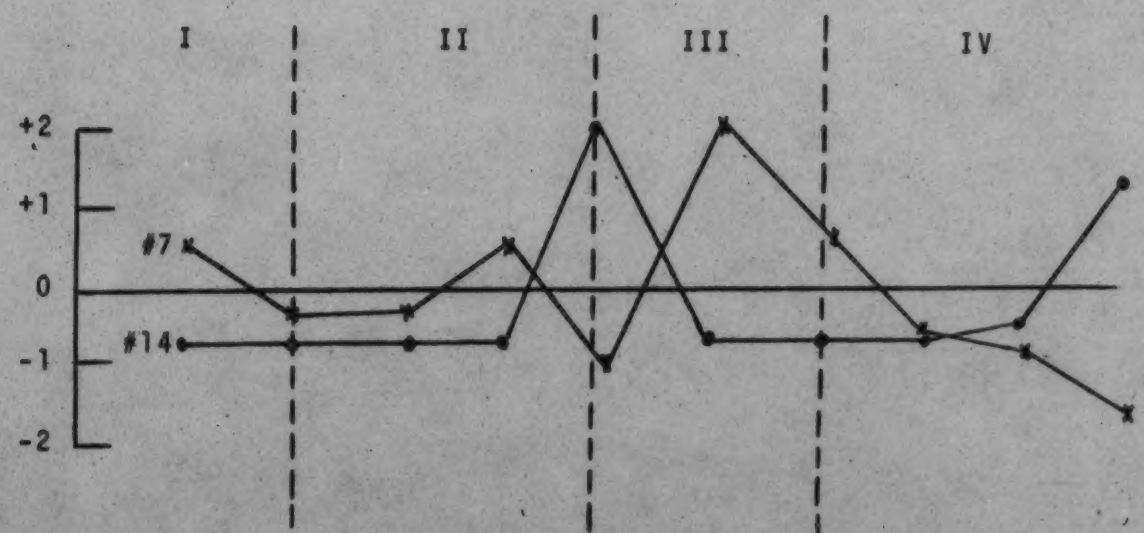
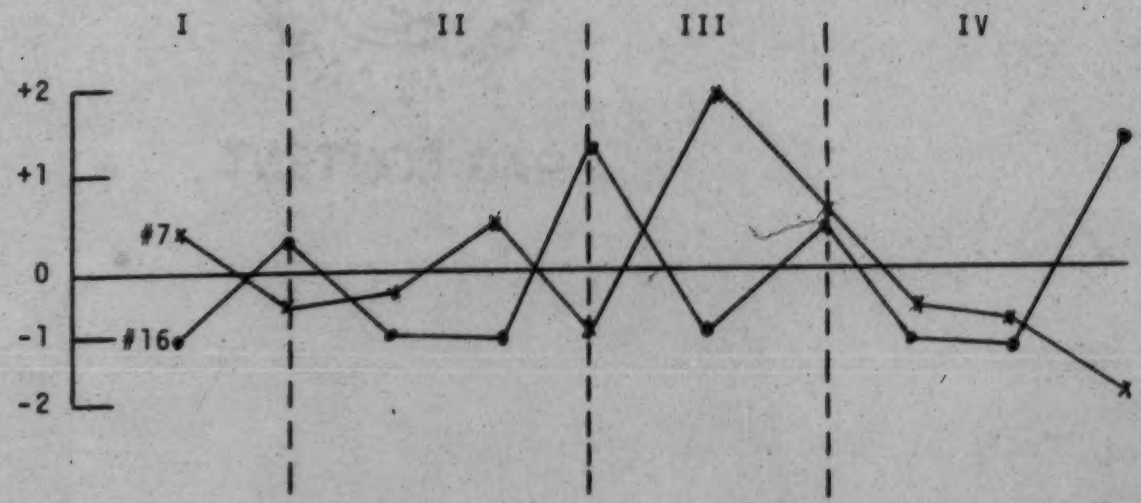


FIGURE B16 (CONTINUED)



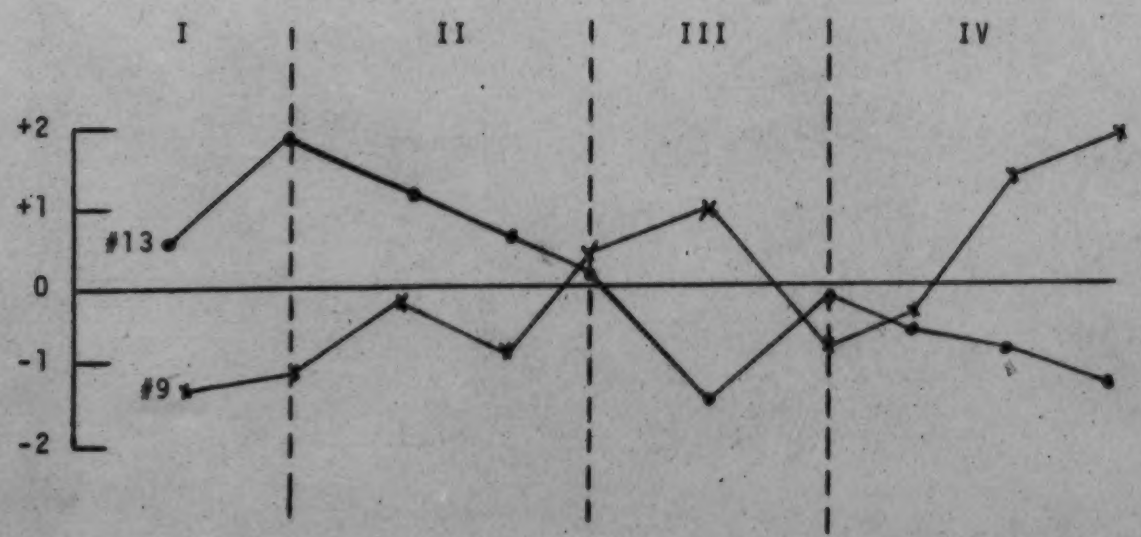
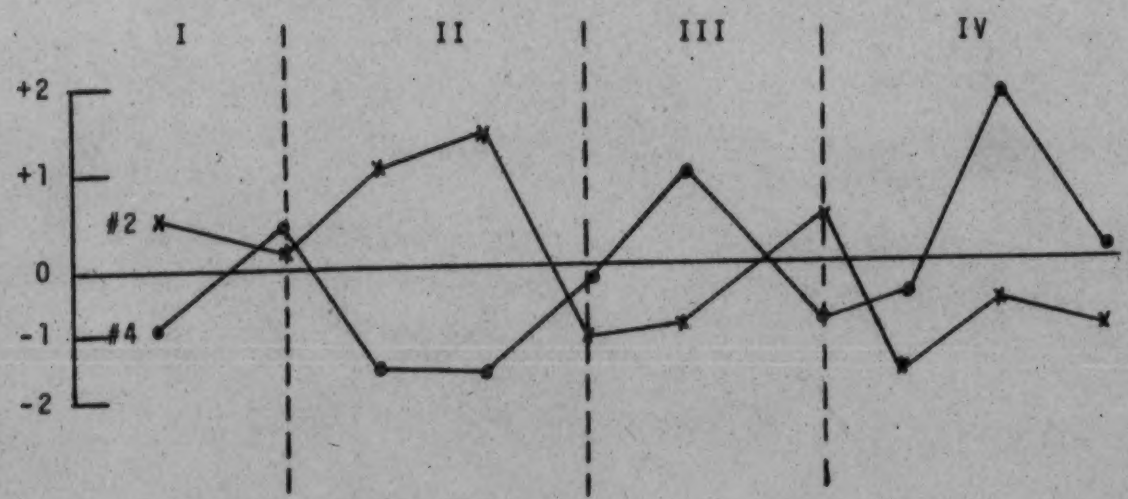


FIGURE B17

PLOTS OF Z-SCORE VALUES OF MANN'S SIXTEEN CATEGORIES
ACROSS TEN REPEATED MEASURES ON GROUP 2
(NEGATIVELY CORRELATED)



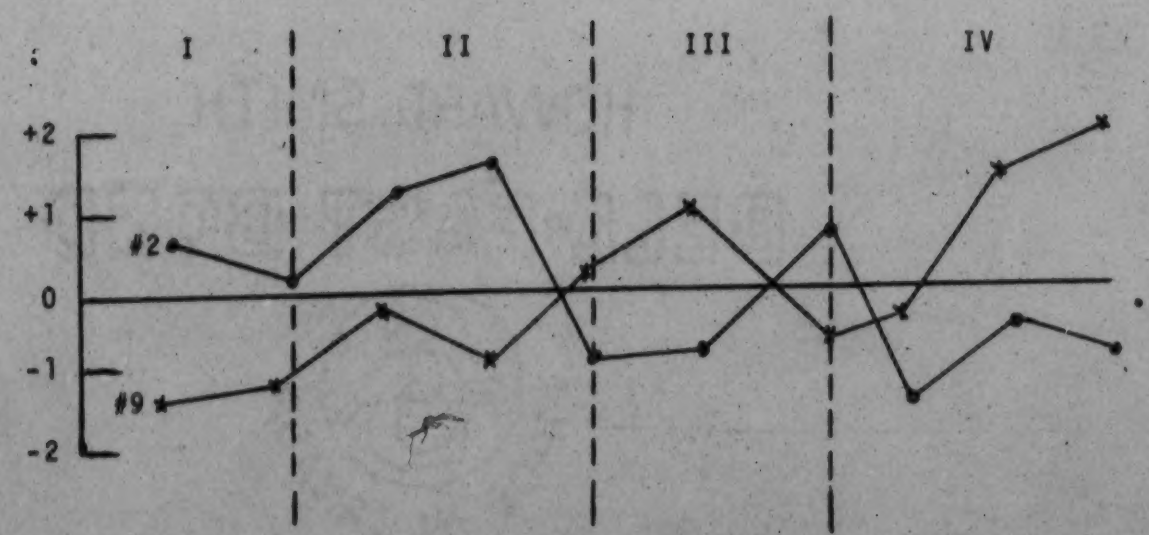
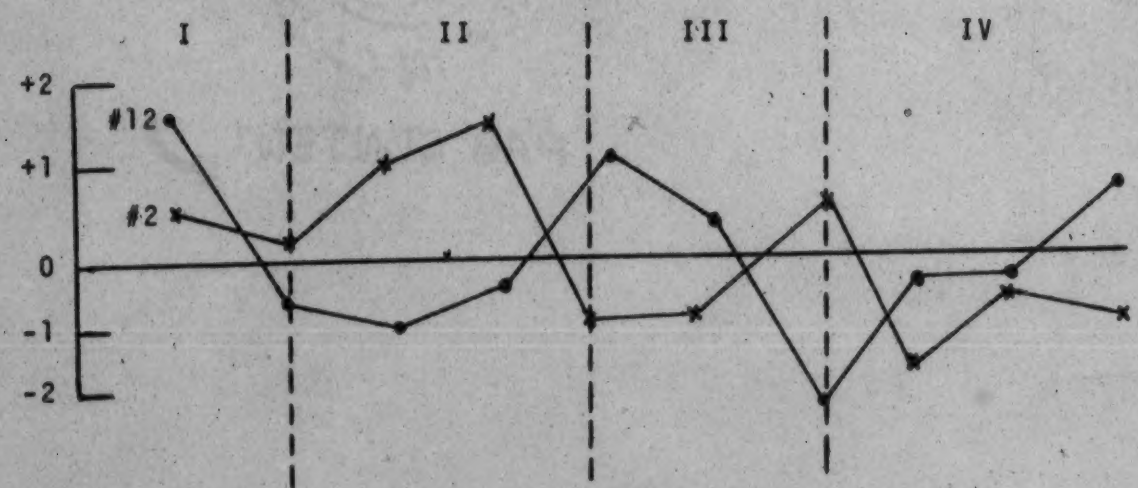


FIGURE B17 (CONTINUED)



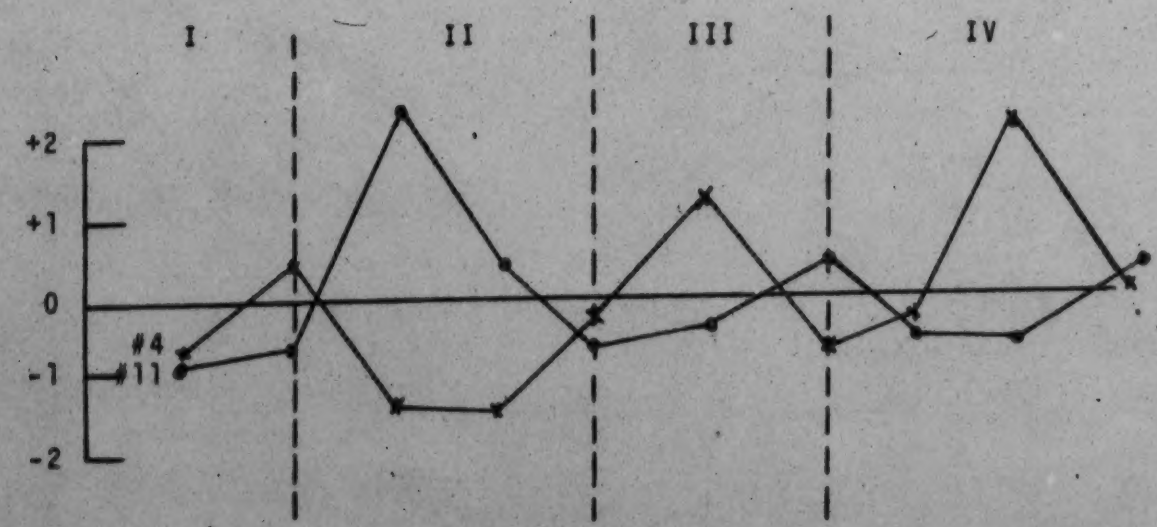
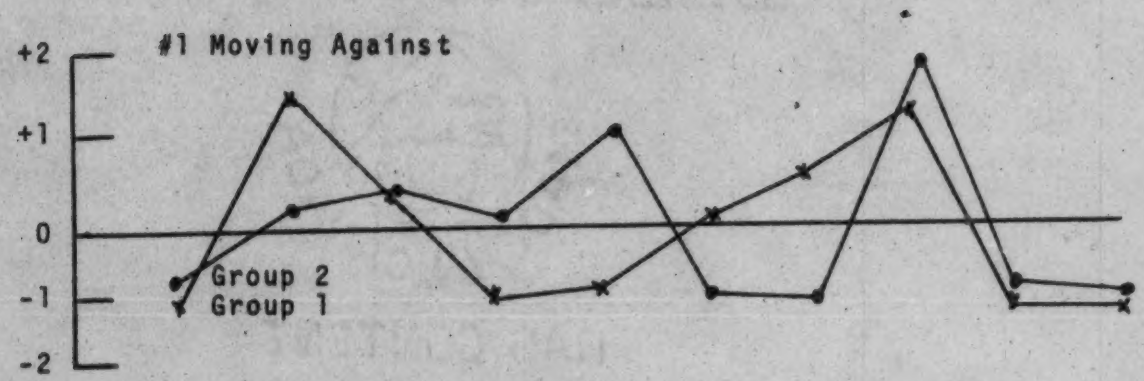


FIGURE B18

PLOTS OF Z-SCORE VALUES OF CATEGORIES
SHOWING A SIGNIFICANT ($p < .05$) AB INTERACTION
EFFECT ON GROUPS 1 AND 2



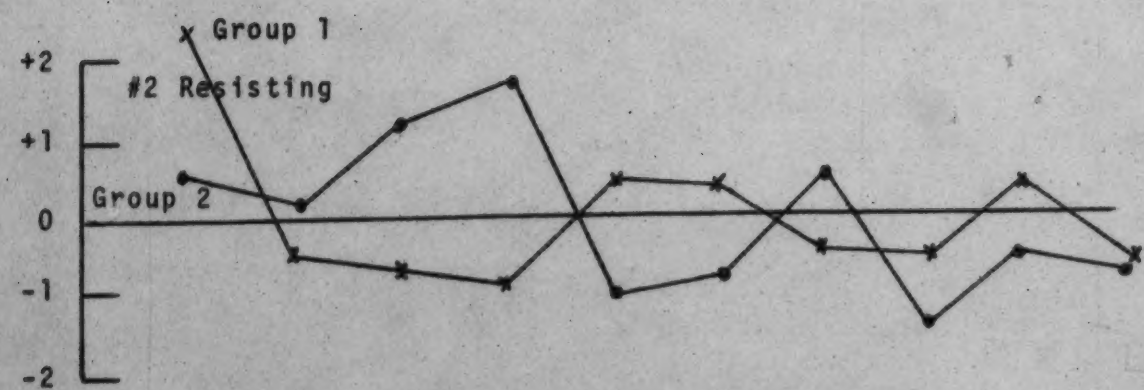
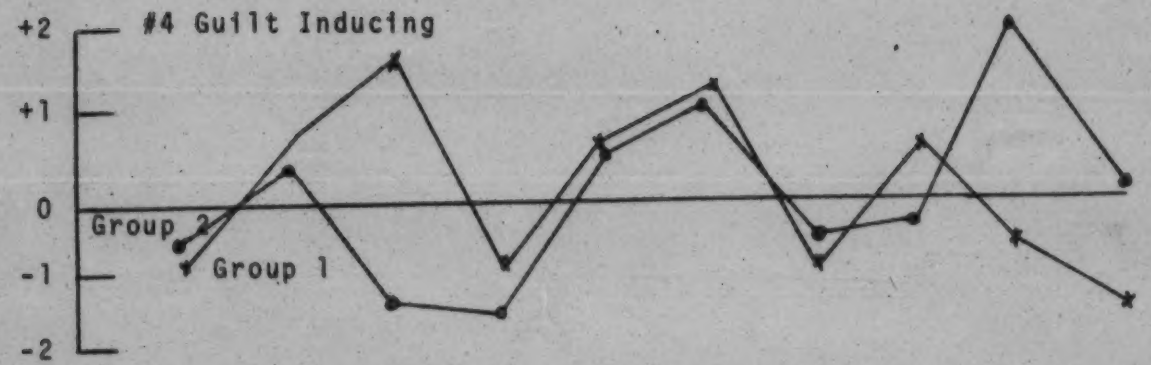


FIGURE B18 (CONTINUED)



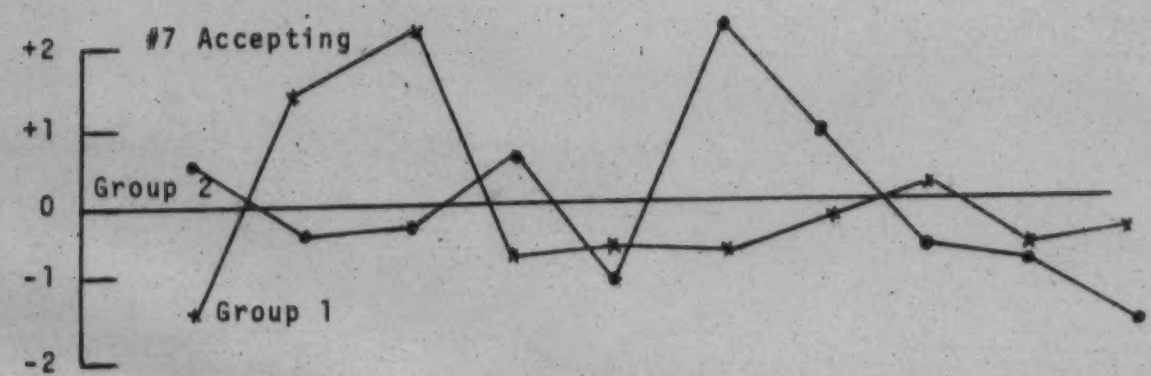
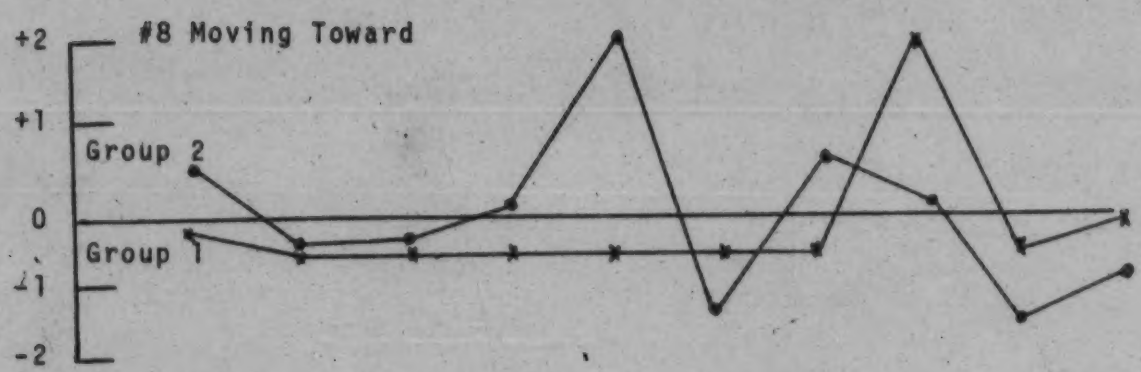


FIGURE B19

PLOTS OF Z-SCORE VALUES OF CATEGORIES
SHOWING A SIGNIFICANT ($p < .05$) AB INTERACTION
EFFECT ON GROUPS 1 AND 2



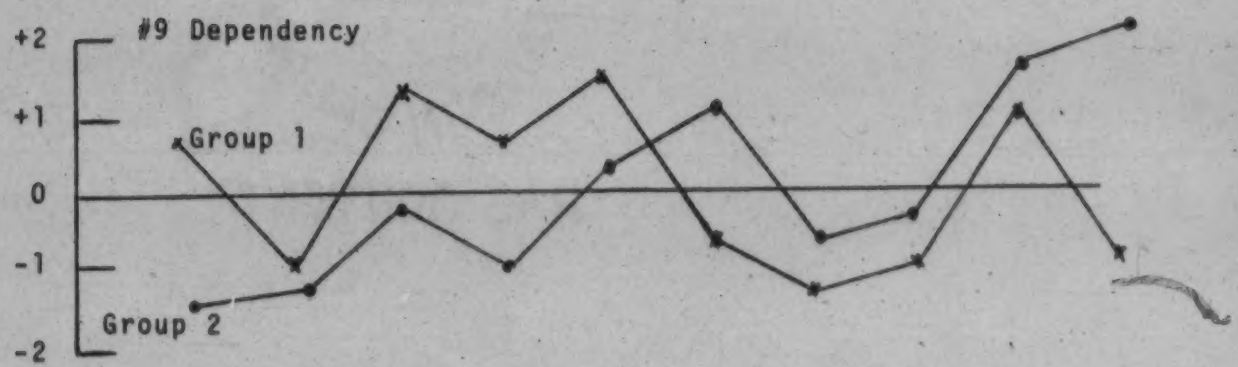
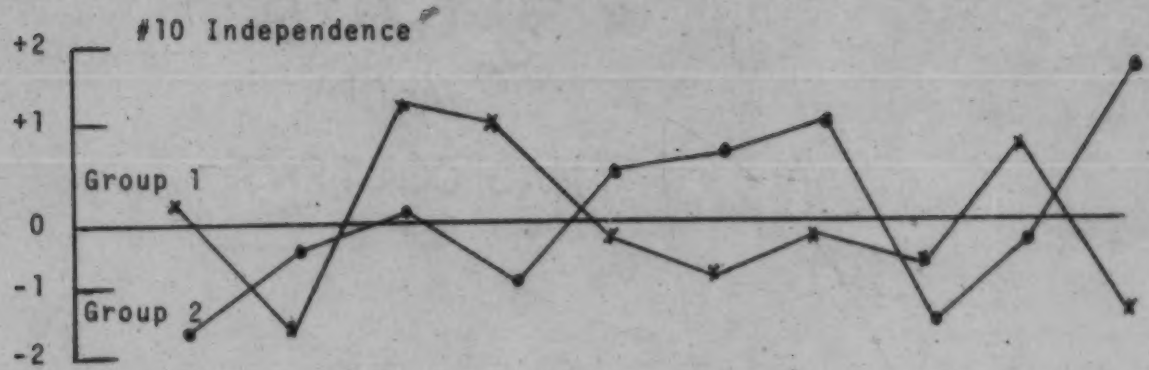


FIGURE B19 (CONTINUED)



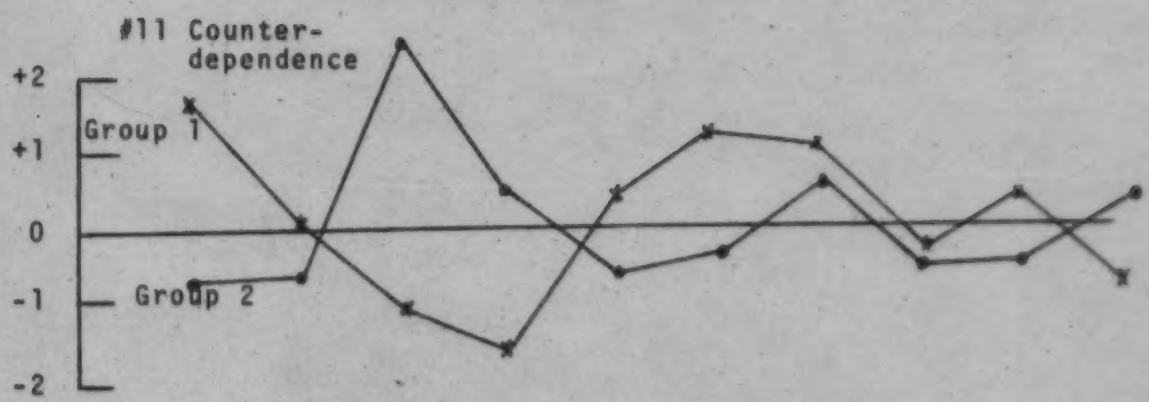
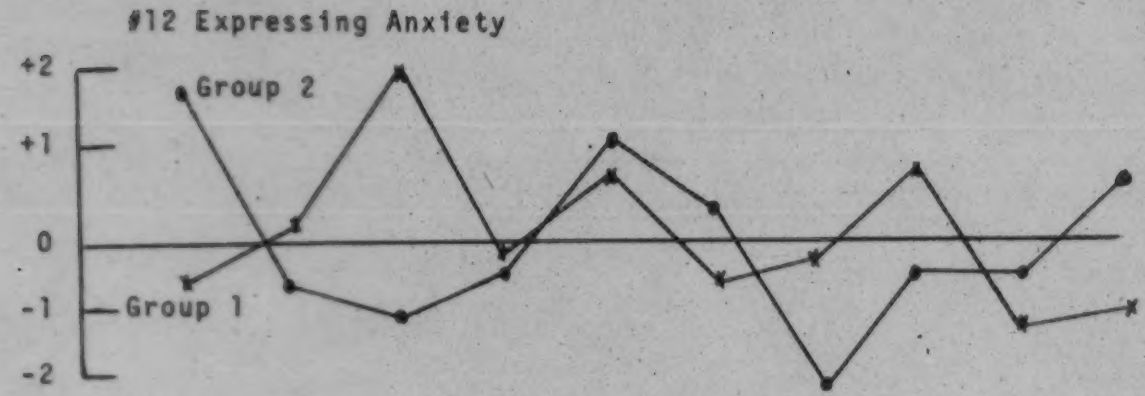


FIGURE B20

PLOTS OF Z-SCORE VALUES OF CATEGORIES
SHOWING A SIGNIFICANT ($p < .05$) AB INTERACTION
EFFECT ON GROUPS 1 AND 2



APPENDIX C

TABLES RELATED TO INTER-SCORER RELIABILITY

Results of Inter-Scorer Reliability

Regarding whether or not to consider a given utterance as an act, there was relatively high agreement. Group 1 agreement on acts was 86.6% and Group 2 agreement was 97.5%. This compares favorably to the agreement level in Mann's (1967) study which ranged from 93% to 98%.

The agreement on level of inference for Group 1 was 82% and 97.5% for Group 2. Mann reported an agreement exceeding 90% on level of inference.

Agreement on categories is a more complex issue because the scoring system permits double scoring of a given act. Two systems were used to calculate agreement: (1) average percentage agreement over the ten acts, and (2) percentage perfect agreement and total disagreement. This second system is recommended by Mann (1967). For Group 1 the average percentage agreement was 81.1% and 73.9% for Group 2. Percentage perfect agreement for Group 1 was 70% and 61.3% for Group 2. Mann reported an average of 63% perfect agreement. Total disagreement for Group 1 was 10% and 15% for Group 2. Mann reported between 9% and 13% "substantive disagreement" in his 1967 study.

While Group 2 agreement on categories is somewhat lower than Group 1, it is still within acceptable limits, if Mann's 1967 study is used as a standard. Even if one were to question the level of reliability for Group 2, it can be assumed that the high reliability level for Group 1 provides sufficient evidence of the total scoring reliability. One explanation for the lower agreement for Group 2 was that the other rater was the leader for Group 2.

For a detailed account of the reliability scores for each session, see Tables C1 and C2.

TABLE C1

INTER-SCORER RELIABILITY RESULTS OVER NINE SESSIONS

(GROUP 1)

Sessions	% Act Agreement	% Level Agreement	% Category Agreement	% Perfect Agreement on Categories	% Total Disagreement on Categories
# 2	60	80	80.00	60	0
# 3	90	90	80.00	70	10
# 4	100	100	88.33	70	0
# 5	70	70	80.00	80	20
# 6	90	90	65.00	50	20
# 7	90	90	74.66	60	20
# 8	80	100	78.33	70	10
# 9	100	100	94.66	80	0
#10	100	100	90.00	90	10

Average % agreement on categories over nine sessions = 81.1%.
Average % perfect agreement on categories over nine sessions = 70%.
Average % total disagreement over nine sessions = 10%.
Average % agreement on acts over nine sessions = 86.6%.
Average % agreement on levels over nine sessions = 82.0%.

TABLE C2

INTER-SCORER RELIABILITY RESULTS OVER NINE SESSIONS

(GROUP 2)

Session	% Act Agreement	% Level Agreement	% Category Agreement	% Perfect Agreement on Categories	% Total Disagreement on Categories
# 2	100	100	75.00	60	10
# 3	100	100	70.00	70	30
# 4	100	100	78.32	50	0
# 5	100	100	75.00	70	20
# 6	90	90	61.66	40	20
# 7	100	100	80.00	60	0
# 8	100	100	75.00	70	20
# 9	100	100	71.66	60	20
#10	90	90	80.00	70	10

Average % agreement on categories over nine sessions = 73.9%.
Average % perfect agreement on categories over nine sessions = 61.2%.
Average % total disagreement on categories over nine sessions = 15.1%.
Average % agreement on acts over nine sessions = 97.5%.
Average % agreement on levels over nine sessions = 97.5%.

APPENDIX D

TABLES RELATED TO LEADER BEHAVIOR ACCORDING TO MANN'S (1967, 1970) MEMBER-LEADER OBSERVATIONAL SYSTEM

TABLE D1

PROPORTIONS FOR LEADER #1 (TASK) ON MANN'S M-L CATEGORIES OVER TEN SESSIONS (EACH ENTRY MULTIPLIED BY 1000)

	Categories															
Sessions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
# 1	000	000	000	021	000	000	106	000	000	043	660	170	000	000	000	000
# 2	000	031	000	144	000	000	113	000	021	052	515	093	021	010	000	000
# 3	000	069	000	000	000	000	222	000	000	083	458	153	000	000	014	000
# 4	000	039	000	013	000	000	132	000	013	066	592	145	000	000	000	000
# 5	000	000	000	083	000	000	117	000	017	033	567	183	000	000	000	000
# 6	023	093	000	140	000	000	093	000	000	000	628	023	000	000	000	000
# 7	000	089	022	044	000	000	156	000	000	044	578	067	000	000	000	000
# 8	000	133	000	000	000	033	067	000	000	033	700	033	000	000	000	000
# 9	000	020	000	020	000	000	160	000	000	100	600	100	000	000	000	000
#10	000	040	000	000	000	000	120	000	000	120	680	040	000	000	000	000
Totals 10,000	23	514	22	465	000	33	1286	000	51	574	5978	1007	21	10	14	000
Percentage	.23	5.14	.22	4.65	.00	.33	12.86	.00	.51	5.74	59.78	10.07	.21	.10	.14	.00

TABLE D2

PROPORTIONS FOR LEADER #2 (SOCIAL-EMOTIONAL) ON MANN'S M-L CATEGORIES OVER TEN SESSIONS (EACH ENTRY MULTIPLIED BY 1000)

	Categories															
Sessions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
# 1	000	023	000	023	000	023	046	140	047	163	233	233	047	023	000	000
# 2	000	078	000	020	000	000	176	137	000	373	137	078	000	000	000	000
# 3	000	000	000	021	000	021	167	000	021	333	271	167	000	000	000	000
# 4	019	038	000	019	000	058	135	115	000	154	250	173	019	019	000	000
# 5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
# 6	000	024	049	000	000	000	171	073	000	195	293	195	000	000	000	000
# 7	000	033	000	017	000	017	100	033	017	217	383	183	000	000	000	000
# 8	000	034	000	000	000	052	172	034	017	052	466	172	000	000	000	000
# 9	000	194	000	028	028	000	111	028	000	083	361	167	000	000	000	000
#10	000	043	000	217	000	000	087	000	043	043	435	130	000	000	000	000
Totals 9,000	19	467	49	345	28	171	1165	560	145	1613	2829	1498	66	42	000	000
Percentage	.21	5.2	.51	3.8	.31	1.9	12.9	6.2	1.6	17.79	31.40	16.50	.73	.46	.00	.00

TABLE D3

PROPORTIONS FOR LEADER #1 ON LEVELS OVER TEN SESSIONS (EACH ENTRY MULTIPLIED BY 1000)

	Level			
Sessions	1	2	3	4
# 1	362	085	000	553
# 2	205	196	031	567
# 3	361	139	028	472
# 4	342	039	000	618
# 5	433	083	000	483
# 6	209	233	023	535
# 7	111	289	000	600
# 8	267	167	000	567
# 9	140	260	000	600
#10	200	280	000	520
Totals 10,000	2630	1771	82	5515
Percentage	26.3	17.7	8.2	55.15

TABLE D4

PROPORTIONS FOR LEADER #2 ON LEVELS OVER TEN SESSIONS (EACH ENTRY MULTIPLIED BY 1000)

	Level			
Sessions	1	2	3	4
# 1	721	140	000	140
# 2	490	059	000	451
# 3	333	312	021	333
# 4	423	231	000	346
# 5	---	---	---	---
# 6	341	341	000	317
# 7	300	433	000	267
# 8	431	207	000	362
# 9	361	278	000	361
#10	565	174	000	261
Totals 9,000	3965	2175	21	2838
Percentage	44.05	24.10	.23	34.80

APPENDIX E

TABLES AND FIGURES ASSOCIATED WITH THE PAT SCHEDULE OF MEMBER-LEADER RELATIONSHIPS

TABLE E1

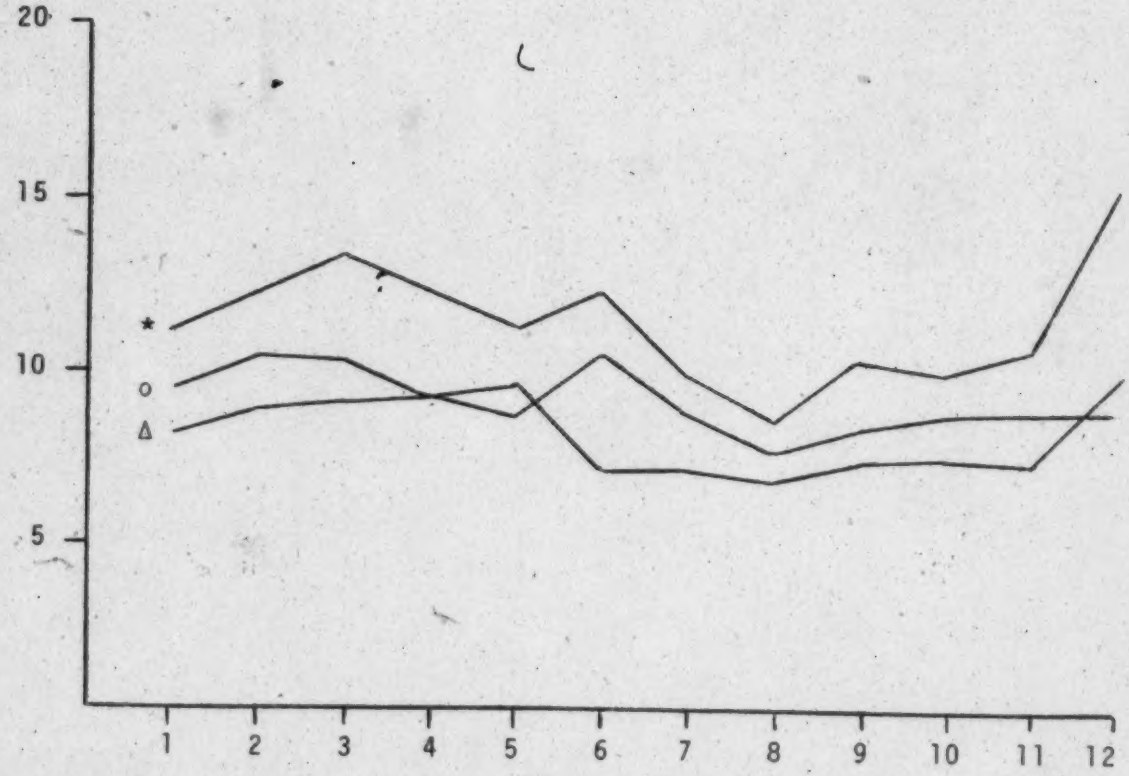
PRINCIPAL COMPONENTS ANALYSIS OF ATTRIBUTE ITEMS ON THE PAT SCHEDULE OF MEMBER-LEADER RELATIONSHIPS (VARIMAX; ROTATED FACTORS)

Attribute	Component		
	Power	Affection	Task
1. Dominating	0.661+	-0.076	0.616
2. Warm and Understanding	0.074	0.966	0.022
3. Businesslike	0.125	-0.177	0.861
4. Can Summarize Well	0.288	0.515	0.641
5. Sincere and Devoted	0.149	0.971	0.096
6. Outspoken	0.688	0.226	0.165
7. Manages Others	0.846	0.236	0.184
8. Appreciative	0.023	0.935	0.167
9. Interprets and Makes Diagnoses	0.387	0.510	0.661
10. Knowledgeable	0.294	0.293	0.770
11. Eager to Get Along	0.177	0.944	0.068
12. Able to Give Orders	0.842	0.305	0.172
13. Forceful	0.877	0.009	0.207
14. Tender and Unselfish	0.087	0.946	0.091
15. Productive	0.283	0.649	0.542

+ Underlined items (e.g., 0.661) are considered the important attributes of each component.

FIGURE E1

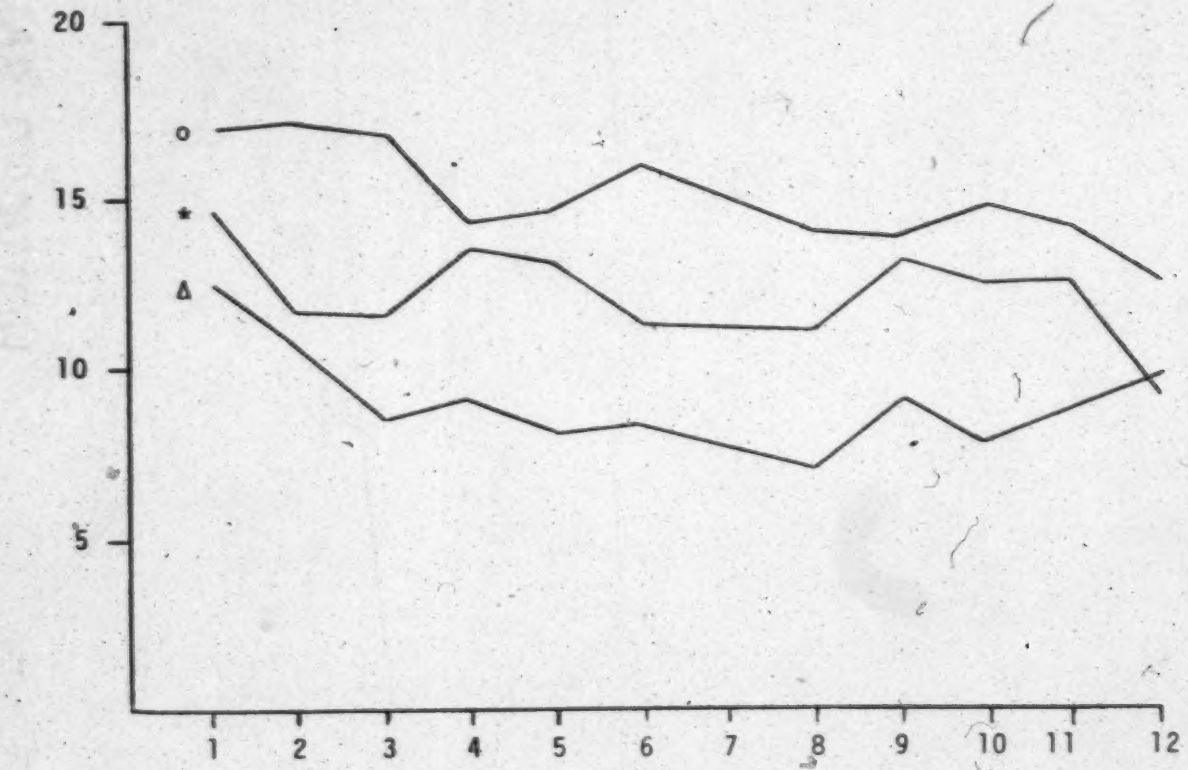
PLOTS OF MEAN PAT SCORES OVER TWELVE REPEATED MEASURES FOR GROUP 1



Δ - Power
o - Affection
* - Task

FIGURE E2

PLOTS OF MEAN PAT SCORES OVER TWELVE REPEATED MEASURES FOR GROUP 2



APPENDIX F

TABLES AND GRAPHS DEPICTING LEVELS OF INFERENCE FOR GROUPS 1 AND 2

TABLE F1

PROPORTION MEANS OF LEVELS OF INFERENCE
FOR GROUP 1 (TASK) OVER TEN SESSIONS

	Levels			
Session	1	2	3	4
1	57.38	356.38	5.69	426.38
2	58.38	146.54	148.85	261.62
3	96.69	283.38	305.92	313.62
4	49.15	123.85	56.85	308.30
5	34.46	397.46	0.00	337.00
6	80.00	314.69	14.08	206.54
7	23.54	267.85	56.77	267.23
8	189.69	237.08	0.00	265.54
9	16.00	360.38	14.38	301.23
10	39.69	283.31	15.08	123.38

TABLE F2

PROPORTION MEANS OF LEVELS OF INFERENCE

FOR GROUP 2 (S-E) OVER TEN SESSIONS

	Levels			
Session	1	2	3	4
1	84.69	330.46	82.15	271.62
2	135.31	269.92	33.31	330.54
3	56.00	396.08	6.92	310.38
4	102.23	295.92	30.77	263.38
5	42.38	368.08	2.46	356.15
6	15.38	290.69	80.54	459.46
7	4.31	323.31	0.00	364.62
8	45.38	224.77	37.23	230.92
9	27.15	365.76	43.08	256.31
10	47.00	479.84	33.15	285.85

FIGURE F1

PLOTS OF PROPORTIONS MEANS OF LEVELS FOR GROUP 1 (TASK) OVER TEN SESSIONS

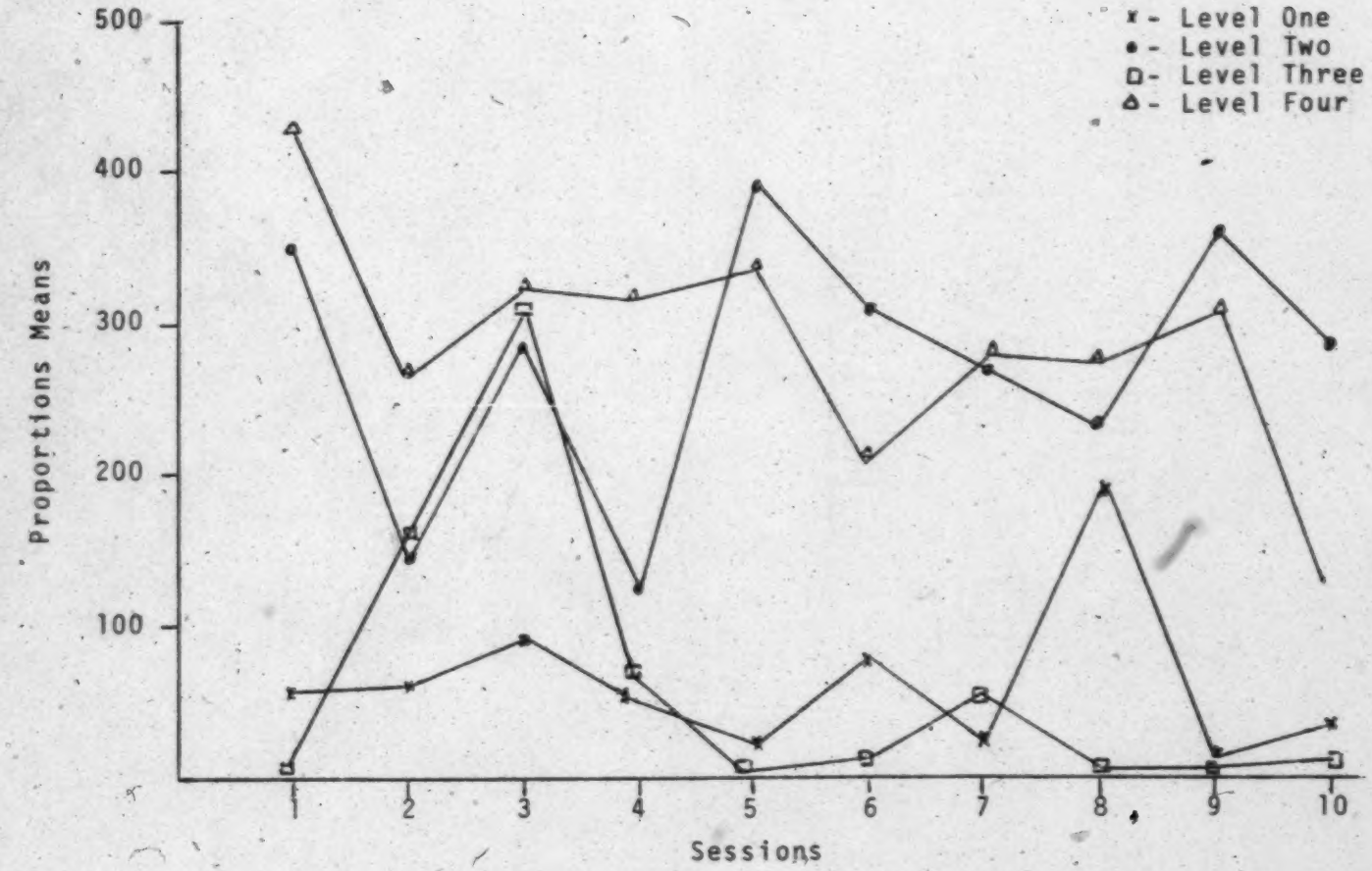
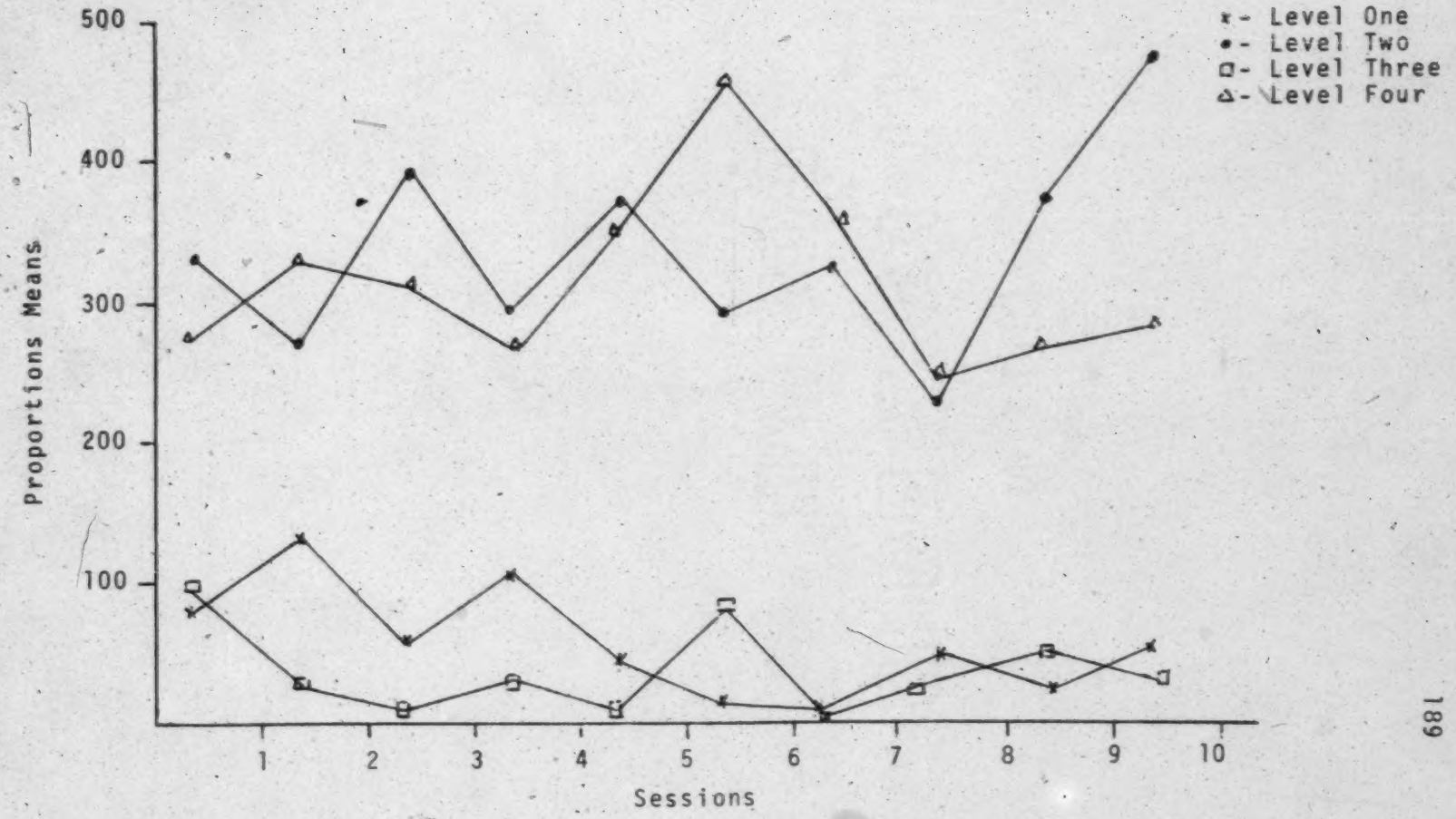


FIGURE F2

PLOTS OF PROPORTIONS MEANS OF LEVELS FOR GROUP 2 (SOCIAL-EMOTIONAL) OVER TEN SESSIONS